A

TREATISE

ON THE

MANAGEMENT

OF

FEMALE COMPLAINTS,

AND OF

CHILDREN IN EARLY INFANCY.

BY

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TO

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IN PARIS, &c.

WHOSE EMINENT ABILITIES HAVE NOT ONLY CONTRIBUTED

TO EXTEND THE FAME OF THIS UNIVERSITY,

BUT HAVE ALSO CONSIDERABLY ADVANCED THE PROGRESS

OF MEDICAL KNOWLEDGE,

THE FOLLOWING SHEETS

ARE OFFERED,

AS

A TESTIMONY OF RESPECT AND REGARD,

BY

THE *AUTHOR.*

PREFACE.

THE objections commonly urged against works on medical ſubjects for the uſe of families, appear to be founded on partial views, illiberal prejudices, or the improper manner in which ſome books of that kind have been written.

ALTHOUGH the mode of cure of diſeaſes in every caſe cannot be fully explained to people ignorant of the medical art, as no invariable rule of practice is applicable to the ſame diſorder in different conſtitutions, it will not be denied,

 that

that directions can be given by which the progress of many complaints may be retarded, and the causes of not a few guarded against.

THE particular department of the healing art in which the author of the following sheets has been engaged for upwards of thirty years, afforded him frequent opportunities of regretting the want of a work on the management of FEMALE COMPLAINTS, calculated to fulfil these important purposes. He was therefore induced, about ten years ago, to publish a work of that nature.

IN correcting it for a third edition, within these few months, he perceived that many improvements might be made, which would render it more extensively useful than formerly; but he found that these could not be introduced without altering completely the form and style of the book.

The

The importance of the object rendered him insensible to the difficulty of the undertaking; and the aid which he derived from an assistant, who has devoted himself for several years to the same line of profession, (his own son), encouraged him to proceed with the task.

The following sheets, containing directions for the Management of Female Complaints in every period of life, and for the Treatment of Children in early Infancy, it is hoped, are now adapted for general use.

Through the whole work, the author has carefully endeavoured to point out the nature of the several diseases of which he treats, to shew the circumstances from which many complaints originate, in order that they may be guarded against, and to distinguish those cases which may be safely trusted to the management of the

patients themſelves, from thoſe which require the attendance of a medical practitioner.

ALTHOUGH he has not failed to avail himſelf of thoſe obſervations of others which are confirmed by his own experience, he has avoided references to other books; becauſe, in general, it would be improper to refer thoſe for whom this work is intended to medical authors.

The ſtyle of the following ſheets is ſimple. Elegance and meanneſs of language would have been equally inadequate to the ſubject. Perſpicuity, being the moſt eſſential object, has been always ſtudied. Technical terms have therefore never been employed; and the few foreign words which are uſed are either univerſally underſtood, or may be very eaſily learned. They are only ſubſtituted for Engliſh expreſſions

expreſſions which are thought to ſound harſhly to delicate ears.

As the nature of the diſorders incident to mankind cannot be explained to thoſe who are totally unacquainted with the ſtructure of the human body, a view of that intereſting ſubject, rendered intelligible by being diveſted of terms of art, and by the rejection of minute anatomical diſquiſitions, is exhibited in the Introduction.

THE obſervations in the Firſt Part of the Management of Female Complaints relate to all the diſeaſes which occur in the unimpregnated ſtate, and include alſo the changes in conſequence of pregnancy. In the Second Part, the treatment of the complaints during child-bearing is detailed; and in the Third Part, directions are given for the management of lying-in women.

MANY of the obſervations are illuſtrated by caſes; but, for obvious reaſons, the names of the parties are concealed. The author's character, it is hoped, will protect him from any cenſures on this neceſſary precaution.

THE great mortality of children, eſpecially in large cities, probably originates principally from the neglect of thoſe attentions which the ſtate of infancy requires. The firſt chapter on the Management of Children comprehends, therefore, thoſe rules for their treatment which experience has proved to be the moſt effectual means for preventing diſeaſes. In the other chapters, the complaints which occur moſt commonly during the period of nurſing are deſcribed, and the mode of cure directed.

THE popular names of diſeaſes are in general

neral adopted; but the ſcientific appellation is alſo commonly added.

The Appendix contains Forms of Medicines adapted for the diſeaſes detailed in the book, Directions for conſulting medical Practitioners by letter, and Hints for the choice of a Nurſe.

The publication which gave origin to the preſent work, was intended as a text-book for the author's female pupils, as well as for the uſe of families. But as many ſubjects abſolutely neceſſary in the former view muſt be very improper in the latter, he has placed theſe in a ſmall *Syllabus*, for the ſole uſe of Midwives attending his lectures. By this arrangement, every indelicate diſcuſſion is avoided in the following ſheets.

Edinburgh,
April 2. 1792.

ERRORS to be correcTted.

Page

51. line 12. *after* &c. *add*, this is effected by numerous ſmall muſcles on its upper part.

143. line 14. *read*, fluſhings in the face, and heat in the palms.

209. line 26. *for* which I ſhall relate, *read* which I relate.

218. laſt line, *for* and all times, *read* and at all times.

219. line 12. *for* part of the womb; in every caſe, *read* part of the womb in every caſe;

228. line 16. *for* ther, *read* mother.

270. line 12. *for* ſhould be truſted, *read* ſhould not be truſted.

299. line 25. *for* preternatural labour, *read* preternatural or laborious labour.

439. line 8. *for* Firſt children, *read* Firſt-born children.

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IN-

INTRODUCTION.

THE ſtructure of the human body, it is univerſally allowed, ought to be well underſtood by thoſe who attempt to obviate or cure diſeaſes.—A partial knowledge of anatomy, however, it has been imagined, is ſufficient for thoſe who practiſe Midwifery.

This idea muſt be erroneous, for the ſeveral organs are ſo intimately connected with each other, that the ſtructure of any particular one cannot be explained, without a reference to that of others.

A view of the mechaniſm of the human body muſt ſuggeſt to the practitioner of midwifery the neceſſity for that guarded caution in practice which cannot be too much inculcated, and may perhaps prevent many of thoſe unfortunate accidents which ignorance of the delicacy and com-

plication of the ſeveral parts of the human ſyſtem has frequently occaſioned.

A ſhort ſketch, therefore, of the ANATOMY of the HUMAN BODY, it is preſumed, will be conſidered a proper introduction to the ſubject of the following ſheets; it will not, it is hoped, prove unacceptable to thoſe for whom this work is intended, as it will illuſtrate many of the remarks which muſt be occaſionally made.

MATERIALS OF WHICH THE BODY IS FORMED.

THE human body is compoſed of certain general principles, by a combination of which the various organs neceſſary for the purpoſes of life are conſtructed. Theſe have been divided into Solids and Fluids.

SOLIDS.

The ſolids conſiſt chiefly of Nerves, Veſſels, Fleſhy parts, Bones and their appendages,

dages, and an inſenſible ſubſtance, which envelopes, connects, or enters into the compoſition of all the other ſolids, called, from its ſtructure, Cellular ſubſtance.

NERVES—The Nerves are white gliſtening cords, originating, and probably deriving their power, from the Brain, and its appendages.

The motion and ſenſation of the different parts of the body depend ſo much on the nerves, that when the principal nerve of any organ is cut through, or very much compreſſed, the ſenſation and functions of that organ are completely deſtroyed.

Every part of the body, therefore, owes its ſenſibility to the nerves which it poſſeſſes; and all the motions of the different organs, from the moſt minute to the moſt conſiderable, are performed by means of the nerves.

Beſides theſe *general* properties of the nerves, they have ſome *particular* powers; for it is through their medium that the actions of the ſenſes are accompliſhed. Thus, on the nerves of the eye and of the noſe, the ſenſes of Seeing and Smelling de-

pend; for the nerves being deſtroyed, the ſenſes no longer exiſt.

To the powers of the nerves, therefore, every function of the body muſt be attributed. It is not, however, aſcertained in what manner they act; it will probably remain one of thoſe myſteries which man is not permitted to explore.

VESSELS.—The veſſels of the human body are very numerous; they are of different ſizes and forms, and have different uſes aſſigned them. Some are intended to convey to the blood what is neceſſary to ſupply its conſtant waſte; others carry the blood itſelf to all the various parts for the purpoſes of nutrition; ſome prepare it for that purpoſe, and others diſtribute it in a prepared ſtate to the different organs of the body. All the veſſels may therefore be arranged under the denomination of the Abſorbent, Circulatory, Secretory, and Excretory.

The ABSORBENT VESSELS are extended over the ſurface and the cavities of the body; they are of different ſizes; many of

of them are ſcarcely viſible; they are very ſtrong, although ſo thin as to be tranſparent.

The abſorbent veſſels all open on the ſurface of the body, and of its ſeveral cavities, by extremities ſo ſmall, that their ſtructure cannot be aſcertained. They are, however, capable of abſorbing fluids, which they convey to a general reſervoir, (to be afterwards deſcribed), and which are prevented from returning, by having, in their courſe, numerous valves, which allow the paſſage of the fluids in the direction of the general reſervoir, and prevent their return.

The abſorbent veſſels have been divided, from the appearance of their contents, into *Lymphatics* and *Lacteals*. The Lacteals are confined to the belly; the Lymphatics are diſtributed over the reſt of the body.

In the courſe of the latter veſſels, roundiſh bodies of a red or brown colour, larger in children than in grown perſons, called *Conglobate glands*, are found. Their functions have not yet been ſatisfactorily explained;

explained; therefore it is unneceſſary to deſcribe their ſtructure minutely.

Circulatory Vessels are thoſe which carry the blood to the different parts of the body, and return it from the ſame parts to its general reſervoir, the Heart. Thoſe which perform the former purpoſe are ſtyled Arteries, and thoſe deſigned for the latter, Veins.

The *Arteries* are thick, ſtrong cylindrical tubes, poſſeſſing a power of puſhing forwards their contents; by which means an alternate contraction and dilatation takes place, which occaſions that peculiar action, termed the Pulse. By this the arteries are diſtinguiſhed from the veins in the living body.

The arteries terminate principally in two ways, in Exhalents and Veins.

The ſtructure of the Exhalent veſſels is ſo minute, that it is imperfectly known. Their uſes, however, are evident; for they ſerve the important purpoſes of ſupplying a fluid which moiſtens all the internal parts of the body; and they aſſiſt to throw off the

the impurities of the blood, by what is termed *Infenfible perfpiration.*

The *Veins* are confidered to be reflections of the arteries. They return the blood from the different parts, and generally accompany the courfe of the arteries. They are fo tranfparent, that the blood can be perceived of a bluifh colour through them. They poffefs, like the abforbents, *valves*, which prevent the blood from turning out of its courfe towards the heart; and they have no pulfation.

In other refpects the veins refemble the arteries.

The SECRETORY VESSELS are thofe which are deftined for preparing from the blood the various fluids which are neceffary for the prefervation of the different functions of the human body.

They are merely modifications of the blood-veffels, nerves, and lymphatics, known by the name of GLANDS. Some of thefe are fimple in their ftructure; for being hollow, and receiving a great quantity of blood-veffels, they feem merely adapted for the ftagnation of the blood,

blood, which is either afterwards forced through an opening, by the preſſure of ſome of the neighbouring parts, or taken up by a particular apparatus for that purpoſe.

The more complicated glands, although they prepare different kinds of fluids, ſeem all to be of the ſame general ſtructure. They are of different ſizes, and conſiſt of a vaſt number of blood-veſſels, &c. wonderfully intermixed with each other, dividing into very minute branches, and formed into numerous ſmall inequalities.

The EXCRETORY VESSELS proceed from theſe glands. Riſing from innumerable ſmall branches, they terminate in one or more trunks, and convey the prepared fluid to the parts for which it is deſigned.

By its veſſels, therefore, the body is nouriſhed, and its unneceſſary or worn-out parts are carried off. Hence every part of the body muſt be ſupplied with veſſels; though in ſome they are ſo very minute, that they are inviſible.

FLESHY

FLESHY PARTS.—The fleshy parts of the body are divided naturally into portions of various forms, called by anatomists MUSCLES.

These are all found to be composed of an amazing number of very minute threads, intermixed with blood-vessels, by which they are generally of a reddish colour, and with nerves, by which their actions are performed.

The fleshy parts are destined for performing the different motions of the body; for which purpose, they are of various forms and sizes, and in various situations.

The manner in which the fleshy parts perform their actions is by the fibres or threads of which they are composed becoming shortened, which, as has formerly been observed, depends on the nerves.

The actions of most of the fleshy parts can be commanded by the WILL; and hence are called VOLUNTARY. The muscles not subject to the will are those on the actions of which life depends. With a power over these the Supreme Being has

not thought fit to intruſt man. 'Theſe muſcles perform the INVOLUNTARY actions of the body. As, however, the will is capable of increaſing or diminiſhing ſome of *theſe actions*, a third kind of muſcular power has been termed MIXED.

BONES.—The bones are the hardeſt and moſt ſolid parts of the body. They determine its ſhape; they ſupport and move its various parts; and they afford, by the cavities which ſome of them form, ſafe lodgement for ſeveral important organs.

The bones are inſenſible, though furniſhed with minute nerves: they are, in the healthy ſtate, of a whitiſh colour, tho' they have many ſmall blood-veſſels in their ſubſtance.

The appearance of the bones differs materially in their external and internal parts; for externally they are firm and ſolid, but internally they are hollow, and of a ſtructure reſembling ſponge or honey-comb. In conſequence of this texture, they are leſs heavy, and much more ſtrong, than if they had been ſolid.

The

The bones are connected to the fleshy parts of the body, and to one another. Although the motions of the body are performed by the *Muscles*, these cannot act without having a proper support; that, the *Bones* supply; while the *Nerves* communicate to the muscles the power of action.

APPENDAGES OF THE BONES.—Cartilage and Ligaments may be considered as the appendages of the bones.

CARTILAGE, or GRISTLE, is a white, solid, smooth, and insensible substance, generally serving to connect the bones, and for the attachment of fleshy parts.

The LIGAMENTS are white, glistening, insensible cords, differing in shape and thickness in different parts. They serve to form, in some places to strengthen, the connection of the bones; and they also afford attachment to fleshy parts, where there are deficiencies in the bones.

CONNECTION OF THE BONES.—The bones are joined to each other in such

a manner, that between ſome of them motion is allowed, while others are firmly united together. Hence the ARTICULATION of bones has been divided into MOVEABLE and IMMOVEABLE.

The MOVEABLE ARTICULATIONS are of various ſtructures; for ſome are ſo formed as to admit of motion in every direction, ſome only backwards and forwards, and others from ſide to ſide.

The IMMOVEABLE ARTICULATIONS are formed in one of two ways: The two bones are indented into each other, by cavities in one correſponding with protuberances in the other; or they are fixed firmly together by means of CARTILAGES or LIGAMENTS.

CELLULAR SUBSTANCE.—The various ſoft parts of the body are connected by an inſenſible ſubſtance, of a looſe open texture, ſomewhat like net-work. Hence called CELLULAR SUBSTANCE.

Every part of this ſubſtance communicates with the other; from which circumſtance, air, or any fluid, having acceſs to one

one part of it, may be eaſily extended over the whole *.

FLUIDS.

The fluids of the human body may be arranged under the following claſſes.

1. The fluid formed by digeſtion, called Chyle.

2. The Blood.

3. The Fluids prepared from the Blood.

CHYLE.—The chyle is a white, milky-like, ſweetiſh fluid, without ſmell or any active ſenſible quality. By it the blood, which is continually waſting, is ſupplied. On a due proportion, therefore, of the chyle, the nouriſhment of the body muſt depend.

BLOOD.—The common appearance of

* It will occur to readers who have a previous knowledge of anatomy, that in the above deſcription ſome of the ſolids are omitted, as the INTEGUMENTS, HAIR, and NAILS. Theſe are referred to the deſcription of the PARTICULAR STRUCTURE of the BODY.

blood is familiar to every one. When taken from a living perſon, as in the common operation of blood-letting, it appears at firſt of an uniform conſiſtence; but after having remained for ſome time at reſt, it ſpontaneouſly ſeparates into two parts, a *thin yellowiſh water*, and a *thick red jelly*. The former is of a ſaltiſh taſte, and can be jellied by heat; the latter is compoſed of red parts, and a ſubſtance which jellies whenever it is placed at reſt.

The proportion of theſe parts to each other differs in different perſons, and in the ſame perſon, according to the ſtate of health.

From the blood all the fluids of the body (except the chyle) are prepared.

FLUIDS PREPARED from the BLOOD.—Theſe are prepared from the blood in two ways: either by ſimple ſeparation, or by a certain power of the preparing organs, which cannot be referred to mechanical principles.

Theſe fluids differ materially from one another. Some are watery, ſome ſlimy, and others coagulable, or oily. They may all

all be comprehended under the following claſſes.

The WATERY,
The SLIMY,
The GELATINOUS,
The OILY, and,
The MIXED FLUIDS.

WATERY FLUIDS. — Some of theſe fluids are neceſſarily thrown off from the body, from being uſeleſs or hurtful; and ſome of them are neceſſary for diluting the food and drink: the former are the URINE and PERSPIRABLE matter; the latter are the ſaliva, or ſpittle, and the fluid prepared by one of the bowels, called PANCREAS. To the watery fluids may alſo be referred the TEARS.

URINE.—The appearance of the urine is well known. It is, in the healthy ſtate, of a ſaltiſh taſte, and of a ſtraw colour, with a ſediment of the ſame colour, after having been paſſed for ſome time.

The appearance and quantity of the urine vary in different perſons, according to the quantity and quality of their food, and drink,

drink, and alſo in the ſame perſon, according to the ſtate of health.

The PERSPIRABLE MATTER, when collected in quantity, is called SWEAT. It reſembles urine in its taſte and qualities; but has a different colour and ſmell, probably from being mixed with ſome other ſubſtance in its paſſage from the body.

The SALIVA, or SPITTLE, is of a clear limpid appearance, almoſt inſipid, and more viſcid than the urine or perſpirable matter.

The ſaliva aſſiſts the organs of taſte, preſerves the power of the organs of ſpeech, prevents the uneaſy ſenſation of *thirſt*, and probably ſerves ſome important purpoſe in digeſtion.

The FLUID PREPARED by the PANCREAS is nearly ſimilar to, and is thought to be of the ſame uſe in digeſtion with, the SALIVA.

TEARS.—The appearance of the tears is well known: they continually moiſten the delicate organ the eye, without which viſion would be injured.

SLIMY FLUIDS.—The ſlimy or mucous fluids

fluids differ from the watery ones in being more viſcid, and from the gelatinous fluids, in not being coagulable by heat.

The ſlimy fluids are of a whitiſh colour, and are inſipid to the taſte. They ſerve to defend thoſe organs which are adapted for the paſſage of air or fluids. Hence the noſe, throat, &c. are conſtantly moiſtened with them.

Gelatinous Fluids.—The gelatinous fluids reſemble the mucous and ſome of the watery ones very nearly. They are diſtinguiſhed from them by their becoming jellied when expoſed to heat. The fluid which is found in the ſtomach and inteſtines belongs to this claſs. The whole cellular ſubſtance is moiſtened by a thin fluid, which has been imagined to be coagulable. Wherever this fluid is not furniſhed, the contiguous parts of the cellular ſubſtance grow together.

The Fluid in the Stomach and Inteſtines reſembles in appearance the Saliva, but differs much in its qualities; for it has a ſaltiſh taſte, and poſſeſſes the power of curdling milk.

This fluid is certainly a principal agent of digeſtion; but its manner of action has not been aſcertained.

Oily Fluids.—The oily fluids conſiſt of the Fat, Suet, Marrow, and Ear-wax.

Fat.—The appearance of the fat in the dead body is familiar to every one. In the living body it is in the form of oil, incloſed in very minute bags, placed in the cellular ſubſtance.

The uſes of the fat ſeem to be, to defend the ſeveral parts of the body from the effects of cold and friction; to facilitate the action of the different ſoft parts, by lubricating them; to add to the beauty of the body, by making it every where ſmooth; and, in a certain degree, to nouriſh the body.

Suet.—A matter reſembling ſuet, called by anatomiſts *ſebaceous matter*, is prepared to defend thoſe parts which are much expoſed to the air or to friction, as the face, and armpits, &c.

The Marrow is a fluid of a fatty, oily nature, quite fluid in the living body, more

more penetrating than the fat, and contained within the bones. It has been imagined that the marrow renders the bones leſs brittle than they would be without ſuch a ſubſtance; and perhaps it may ſerve in ſome degree, like the fat, to afford nouriſhment.

The EAR-WAX is a dark-coloured oily fluid, of a very bitter taſte. It defends the minute and delicate organ the ear from external injuries.

MIXED FLUIDS.—There are ſome fluids which differ in quality from all thoſe already enumerated, and which therefore cannot be properly included in any of the above claſſes; ſuch are, the MILK, the BILE, and the FLUID which lubricates all the JOINTS of the body.

MILK.—The appearance of milk, and the different parts of which it is compoſed, (cream, whey, cheeſe, and a little ſugar, to which it owes its ſweetneſs), are well known.

The qualities of milk are not always the ſame in the ſame woman; much leſs in any two women. They depend on a great

variety of circumſtances, more particularly on the health, diet, and mode of life.

Milk is deſigned for the nouriſhment of children in early infancy, and is only furniſhed by *women* after child-birth; though indeed a fluid reſembling it in appearance may be ſqueezed from the breaſts, ſometimes in conſequence of particular diſeaſes, and ſometimes even from the effects of mechanical powers applied to the breaſt.

The BILE is a yellowiſh fluid, of a bitter taſte, reſembling ſoap in its properties. It is prepared in order to be mixed with the food. By this means all the various parts of the food are combined, and the maſs is rendered of an uniform nature, the bile mixing the watery and oily parts together, and correcting any tendency to acidity.

The FLUID which is found in all the JOINTS is of a whitiſh colour, and of an oily, mucilaginous nature. It ſerves to lubricate the joints, by which the effects of friction are guarded againſt.

GENERAL OBSERVATIONS ON THE SOLIDS AND FLUIDS.

FROM the ſlight ſketch which has been given of the materials of which the human body is principally compoſed, it will be perceived, that the ſolids and fluids have a mutual dependence on each other.

Some of the ſolids ſerve to prepare and conduct the fluids; and theſe, in their turn, nouriſh the ſolids: hence every part of the body muſt be ſupplied with veſſels; and as theſe cannot perform their actions without nerves, they muſt neceſſarily enter alſo into the compoſition of every part.

The fleſhy parts of the body are all immediately or remotely connected with bones or cartilages: hence they have a firm ſupport, and are rendered capable of performing the different neceſſary motions.

All the various parts of the body are connected to each other by the inſenſible cellular ſubſtance; conſequently the exter-
nal

nal form of the body depends very much on it.

Theſe obſervations render it unneceſſary to enumerate particularly the veſſels, nerves, fleſhy parts, &c. of the different organs of the body. In deſcribing their ſtructure, therefore, the general ſhape, appearance, and functions, of each part, require only to be explained.

ANATOMICAL STRUCTURE OF THE HUMAN BODY.

THE human body may be divided into the HEAD, TRUNK, and EXTREMITIES. All theſe parts, however, are contained within one covering, the SKIN. Its ſtructure ought therefore to be conſidered before that of any other part.

STRUCTURE of the SKIN.—The ſkin is compoſed of the ſcarf and true ſkin.

The ſcarf ſkin is that fine, tranſparent, inſenſible membrane, which, covering the true ſkin in its whole extent, forms the outer part of the body.

It

It is of different degrees of thickneſs in different parts, and has an infinite number of ſmall perforations, to admit of the paſſage of the hairs, and of the exhalent and abſorbent veſſels. Its uſe is to defend the true ſkin.

The ſcarf ſkin is connected to the true ſkin by a jelly-like ſubſtance, on which the colour of the outſide of the body principally depends: hence this ſubſtance is of a white or duſky hue in Europeans, and of a black or deep brown in negroes, mulattoes, &c.

This jelly-like ſubſtance is probably intended to ſerve as an additional defence to the true ſkin, and alſo to cover its inequalities.

The true ſkin lies immediately below the jelly-like ſubſtance. It is compoſed of a number of fibres, on which its elaſticity depends, intermixed with a great many nerves, and different kinds of veſſels.

The outer ſurface of the true ſkin is covered with ſmall inequalities, which exhibit through the ſcarf ſkin the appearance of furrows. Theſe inequalities are occaſioned

occaſioned by various ſubſtances, as nerves, glands, and roots of hair.

The true ſkin is highly ſenſible. It forms one of the organs of the ſenſes, that of *Touch*. This ſenſe is more acute in the hands, and towards the points of the fingers, than in any other part; and is there defended by a tranſparent, horny-like ſubſtance, the nails.

The true and ſcarf ſkin are perforated by hairs: Theſe are ſpread over all the outer ſurface of the body, except on the palms of the hands, and the ſoles of the feet; though their length is conſiderable only on particular parts.

The roots of the hairs are placed in the true ſkin, and are regularly organiſed parts, having minute veſſels and nerves.

The hair on ſome parts, as on the head, &c. ſerves as an ornament to the body, to adorn which Nature has neglected nothing. In other parts it is more obviouſly uſeful, in defending delicate organs from external injury, as in the eye and noſe; and over the ſurface of the body, it probably protects the tender orifices of the ſkin.

Over

Over the ſurface of the ſkin innumerable ſmall glands are found; ſome of which prepare the ſuet already mentioned, which defends and ſoftens the ſkin; and others are thought to contribute, along with the minute extremities of the arteries, to throw off the perſpirable matter.

All the cavities in the human body are covered with a ſubſtance which has been thought to be a continuation of the *Skin.* This view, from its ſimplicity, may be adopted in a work of this kind, though it were not ſtrictly conformable to the opinion of anatomiſts.

The ſkin, therefore, deprived of its jelly-like ſubſtance, conſequently of a red colour, highly ſenſible, and furniſhed with an apparatus for pouring out ſlime to defend it from air and fluids, may be conſidered to enter into all the cavities of the body, and to form a lining for them.

HEAD.

The head forms the uppermoſt part of the human body. It is joined to the trunk by the neck. It may be divided into the

Head and Face, the limits of each of which are ſo familiary underſtood, that they do not require being deſcribed.

The HEAD, *properly ſo called*, is merely an oval box, formed by a number of bones cloſely connected to each other, containing the brain and part of its appendages.

To the baſe of this box the neck is joined, and to one end the face.

BRAIN. — The brain is a ſoft, pulpy, white-coloured ſubſtance, which is deemed the ſource of the nerves. It occupies all the fore and upper part of the head. Its figure is irregular, and as from its ſtructure no idea can be formed of its uſes, it is unneceſſary to deſcribe its ſeveral parts.

APPENDAGES of the BRAIN. — The brain is connected by two continuations of its ſubſtance, in the form of cords, at its lower part, at the back part of the head, with a ſmall organ, nearly reſembling itſelf in ſubſtance, called the *Little Brain.*

The TRUE and LITTLE BRAIN unite at the baſe of the head, to form the ſubſtance from which all the nerves immediately originate. From this ſubſtance ten pair of nerves paſs out, through ſmall openings

at

at that part of the head to which the face is attached. The continuation of the true and little brain then paſſes out at a large opening at the bottom of the head, to which the bones of the neck are joined, and conſtitutes what is called the *Spinal Marrow*.

FACE.—The form and ſituation of the face require no particular deſcription.

The face of man exceeds that of every other animal, not only in the beauty of its colour, but in the variety of ſigns of the paſſions which it is capable of expreſſing.

The upper part of the face is called the *Forehead* or *Brows*. It differs in form in different perſons. The ſkin with which it is covered can at pleaſure be made to contract in a remarkable degree, in order to expreſs ſome of the paſſions.

EYES.—The Eyes are placed under the forehead, on each ſide of the root of the noſe, lodged in a hollow formed by bones, and rendered ſoft by a quantity of fat, &c. By this means they are guarded from external injuries, from which they are more immediately defended by the eye-lids.

The upper half of the ſockets in which the eyes are placed is ſurrounded by the eye-brows, which conſiſt chiefly of a certain regular diſpoſition of ſhort thick hairs, and which contribute much to the expreſſion and beauty of the countenance.

The *Eye-lids*, which are continuations of the ſkin, rendered capable of motion, and lined with a fine delicate ſubſtance, terminate in the *Eye-laſhes*, which conſiſt of hairs placed in a griſtly ſubſtance.

In each *Eye-laſh*, at the corner next the noſe, there is a ſmall opening at which the *Tears*, after they have moiſtened the eye, enter, to be conveyed into the noſe. At the oppoſite corner, under the eye-laſh, the ſmall body is placed which furniſhes the tears. The eye-lids, beſides defending the eye, ſerve to prevent the tears from being conſtantly poured over the cheeks.

Each Eye is conſtructed in ſuch a manner, that the picture of the object ſeen is repreſented in miniature on the inſide of its bottom; for the light entering at the *Pupil*, paſſes through a thin watery fluid, then through a ſmall tranſparent body like chryſtal, and laſtly through a viſcid

glairy

glairy ſubſtance, like the white of an egg, by which means it is collected in a ſmall ſpace, at the bottom of the eye.

Theſe *Humours*, as they are called, are contained within a ſtrong covering, compoſed of three layers principally, which have been named *Coats*.

The outer layer is almoſt round, projecting a little at the forepart, which is quite tranſparent; in every other part this layer is of a milky white colour. To this outer covering the eye-lids and the apparatus for moving the eye are attached.

The ſecond layer is of a duſky colour; it lines the whole inſide of the outer one, except at its *tranſparent* part, where it is turned back, and forms a ring of different colours in different perſons.

This ring ſurrounds the pupil, and being very irritable, and poſſeſſing a very active power of enlarging and diminiſhing the pupil, it ſerves as a curtain to prevent too great a quantity of light from paſſing into the eye.

The third or inner layer is that on which objects are repreſented; it lines only ſomewhat more than the poſterior half of

of the internal ſurface of the eye; it is of a white colour, and when accurately examined, it is found to be formed by the branches of a large nerve, diſpoſed in the form of net-work. This nerve, which is called *Optic*, paſſes in from the brain to the bottom of the eye.

The eyes are rendered capable of very conſiderable motions; and both being preciſely of the ſame ſtructure (except in caſes of diſeaſe), the motions of each exactly correſpond.

When any object is viewed, both eyes are turned towards it; and although the object is repreſented on the bottom of each in an *inverted poſition*, yet it is ſeen only *ſingle*, and in its *natural ſituation*. The manner in which the idea of an object is tranſmitted to the mind is not underſtood.

NOSE.—The Noſe is the organ of the ſenſe of ſmell; by its form and ſituation it aſſiſts much in giving beauty and expreſſion to the countenance.

The inſide of the noſe is divided in its whole extent into nearly two equal parts by a partition, which is partly of bone and partly of griſtle; at the upper part it is

is covered by a bony arch, terminating in a griſtly ſubſtance, which can enlarge or diminiſh the paſſage to the noſe called the noſtrils.

The inſide of the noſe is lined and defended as other paſſages expoſed to the admiſſion of air are; and over its back part the nerve which communicates the ſenſe of ſmelling is ſpread in a beautiful manner.

The cavity of the noſe is of ſo irregular a figure that it cannot be eaſily explained; at the upper part under the bony arch the cavity is ſmall and of an unequal ſurface; below that it is extended backwards over the roof of the mouth, and terminates in two openings above the root of the tongue.

There are ſeveral ſmall cavities in the bones which ſurround the noſe, lined like it, and communicating with its cavity.

Within the bony arch at each ſide there is a ſmall hole by which the tears enter the noſe; hence, after having moiſtened the eyes, they are employed to dilute the mucus which defends the inſide of the noſe,

noſe, which would otherwiſe become too thick from its expoſure to the air.

The *Senſe of Smelling* is thought to be the conſequence of the air, in paſſing through the noſe, carrying along with it the principles of ſmell from the ſurrounding bodies, and applying them to the nervous branches which are ſpread all over the back part of the noſe.

The TEMPLES owe their flatneſs to the particular ſhape of the bones at that part; they aſſiſt in forming the face into a regular figure, while they afford a large ſurface for the attachment of ſome of the fleſhy parts which move the under jaw, &c.

CHEEKS.—The Cheeks are formed by ſeveral muſcles which move the lips and jawbone, properly covered; they have at their ſide next the ear a large gland between the muſcles: This gland prepares ſpittle, which is conveyed into the mouth through an opening in the inſide of each cheek. From the ſituation of this gland, it is conſiderably compreſſed when the under jaw is moved.

The cheeks contribute much to the beauty and regularity of the countenance;

nance; they aſſiſt ſpeech, ſerve to keep the food within the mouth, &c.

The Ear.—The external ear may be conſidered to be a funnel for collecting ſounds. Though nature has furniſhed it with an apparatus fitting it for motion, very few people poſſeſs the power of moving it.

The internal ear is ſituated within one of thoſe bones which form the ſide of the ſkull; its ſtructure is ſo complicated, and its ſeveral parts ſo very minute, that it is difficult to deſcribe it accurately.

The ſound, collected by the external ear, is conveyed by a long winding narrow canal, which is defended from external injuries by a ſoft liniment called the ear-wax, to a ſmall membrane ſpread over an irregularly ſhaped cavity named the *Drum of the Ear.* Within the cavity of the drum there are four very minute bones, connected by moveable articulations to each other.

The drum has ſeveral ſmall openings, of which it is neceſſary to enumerate only three. One of theſe, covered by the membrane already mentioned, is connec-

ted with the canal leading from the exter-nal ear; another forms the entrance of a paſſage into the mouth; and the third, co-vered with a thin membrane, ſeparates the drum from a very irregularly ſhaped ca-vity called the *Labyrinth*. One end of the range formed by the junction of the ſmall bones is attached to the membrane of the drum, and the other end to the membrane which covers the opening into the laby-rinth.

The Labyrinth is of ſo irregular a form, that is impoſſible, in a ſketch like this, to attempt a deſcription of it; its internal ſurface is lined with a fine membrane, o-ver which a great many very minute ner-vous th eads are ſpread.

It is probable that the paſſage from the external ear and the drum, with its bones, ſerve the purpoſe of collecting ſounds, which being applied to the nerves of the labyrinth, occaſion the *Senſe of Hearing*; but the particular manner in which the idea of that ſenſe is conveyed to the mind, is equally obſcure with that of the other ſenſes.

MOUTH.

MOUTH.—The opening into the mouth is ſurrounded by the lips.

The *Lips* are covered by a fine delicate ſkin of a bright-red colour. They are capable of a variety of motions, and are therefore admirably adapted to expreſs the ſigns of the paſſions, and to form the voice into the different modulations which conſtitute ſpeech.

Below the under lip the face is terminated by the *Chin*, which completes its ſymmetry.

The inſide of the lips and cheeks is covered by a fine ſkin, in which there are many mucous glands. Theſe, by lubricating the whole internal ſurface of the mouth, prevent its functions from being interrupted.

The forepart and ſides of the mouth are ſurrounded by the upper and under *Jaw*; the former of theſe is immoveable, and is formed by bones connected to the cheek-bones and noſe.

The lower jaw is compoſed of one piece in grown perſons, reſembling in form a horſe-ſhoe, connected by its ends to the ſides of the head, below the ear; in ſuch a

 manner,

manner, that it is capable of a very free motion from above downwards, and of a considerable one from side to side.

As the motions of the lower jaw are necessary for several purposes, it has many muscles attached to it, some of which are fixed to the temples and cheek-bones, and others to the neck.

In each jaw there are *Sixteen Teeth*, surrounded by a soft spongy substance, the *Gums*.

The Teeth are of different shapes, some of them being fitted for cutting, and others for bruising or grinding the food; hence they are divided into cutting and grinding teeth.

The Cutting Teeth are shaped like wedges, and have only one root. They consist of the six foremost teeth in each jaw.

The Grinding Teeth, of which there are five on each side in each jaw, are much larger than the cutting ones. They have two, three, or four roots; and their surface on the upper part is unequal, rising into several small points.

The *Teeth* are all covered, in that part which is not within the gum, with a fine

enamel,

enamel. In other refpects they are merely bone, and, like other bones, are fupplied with blood-veffels and nerves.

All that fpace which the teeth of the upper jaw furround, is called the *Palate*, or *Roof of the Mouth*. It has fomewhat the form of an arch, and is covered by the fame fkin which lines all the contiguous parts. The palate is formed of two bones, which feparate the nofe from the mouth; and it is terminated by a kind of curtain, which hangs down from its back part over the root of the tongue.

This curtain, which may be termed the *Moveable Palate*, is feen at the upper and back part of the mouth, in the form of an arch, divided in the middle by a fmall body, refembling a nipple, called the *Pap of the Throat*.

At the termination of the moveable palate, at each fide, an oval gland is fituated. Thefe bodies, from their appearance, are ftyled *Almonds of the Ear*. Their ufe is to furnifh faliva.

The moveable palate is placed before the openings of the nofe into the mouth, by which mechanifm it not only clofes up thefe

these openings when any thing is swallowed, by covering them exactly, but it also conducts the superfluous mucus from the nose into the throat.

The space surrounded by the teeth of the lower jaw is occupied by the *Tongue*, the appearance of which is well known.

The Tongue is formed in such a manner as to constitute the principal organ of taste, and to be capable of a great variety of motions, in order to modify the voice into articulate sounds, and to perform the various functions preparatory to swallowing.

The number of nerves with which it is supplied adapt it for the former, and the numerous fleshy portions of which it is composed, fit it for the latter purposes.

The tongue is bound down to the lower part of the mouth by a membranous cord, to prevent it from too great a degree of motion.

At its root, the tongue is attached to the lower jaw, and to the windpipe; but more especially to a small bone, resembling in miniature the under jaw-bone.

This bone, which may be called *the Bone of the tongue*, by its outer surface, allows

lows of the attachment of the tongue and the muſcles which move it, and by its inner ſurface it permits the top of the windpipe to be ſecurely lodged, and ſerves as a baſis for many of the powers by which the windpipe is acted on.

The bone of the tongue is attached to the under jaw-bone by griſtly portions.

On looking into the mouth of a living perſon, a pretty large opening is obſerved beyond the moveable palate and root of the tongue: This part in common language is called the *Throat.*

The upper part of the throat is more arched than the roof of the mouth. It is formed by part of the baſe of the ſkull, properly covered, and the moveable palate.

The back part and the ſides of the throat are formed by the upper bones of the neck, ſomewhat flattened, and the ends of the lower jaw-bone, covered with the ſame ſort of ſubſtance which lines the inſide of the mouth.

That part of the throat which can be ſeen in a living perſon may be ſaid to reſemble

ſemble a membranous bag. It forms the ſuperior part of the *Gullet.*

Between the tongue and the beginning of the gullet the top of the windpipe is ſituated. At its forepart a ſmall moveable griſtly body, like the tongue in miniature, is attached in ſuch a manner, that when any thing is ſwallowed, it ſhuts up exactly the paſſage to the windpipe, while it allows the food and drink to paſs over it to the gullet, as over a bridge.

TRUNK.

The TRUNK conſiſts of the NECK, CHEST, and BELLY. Theſe are joined together at the back part by a range of bones which connects and ſupports them all, called the SPINE. The deſcription of the ſtructure of the ſpine muſt therefore neceſſarily precede that of the other parts of which the trunk is compoſed.

SPINE.—The Spine is a bony pillar, extending from the top of the neck to the rump, ſerving to ſupport the head, and to connect the ſeveral parts of the trunk, while at

at the ſame time it affords a canal through which the *Spinal Marrow* paſſes down, to furniſh nerves to the trunk and extremities.

The Spine is divided into TRUE and FALSE. The former extends from the top of the neck to the bottom of the loins. The remaining part of the bony pillar conſtitutes the FALSE SPINE.

The TRUE SPINE is compoſed of twenty-four pieces of bone, reſembling each other in their general ſtructure, though they become gradually larger and thicker as they proceed downwards. Seven belong to the neck, twelve to the cheſt, and the remaining five, with the falſe ſpine, to the belly.

Each of theſe pieces is rounded before, and at its back part has ſeveral projections; one particularly prominent in the middle, one at each ſide, and a ſmaller one above and below each of the ſide-projections. Between the forepart and theſe projections there is a hole large enough to admit a finger.

The upper and under ſurfaces of theſe bones are flat.

All the pieces of which the True Spine is composed, are connected to each other by a griſtly layer between them, and ſtrong ligaments fixed to their projections at the ſides and back, in ſuch a manner that the hole in each forms a continued canal for the reception of the ſpinal marrow.

The bones of the True Spine are all capable of motion backwards, forwards, and to a certain degree from ſide to ſide.

From the particular ſtructure of the True Spine, it is adapted for allowing the different motions of the head and trunk, without injuring the ſpinal marrow, any compreſſion on which would induce palſy of the parts below.

The FALSE SPINE conſiſts of a large bone, and a range of ſmall ones. The former of theſe, called the *Sacred Bone*, is joined to the loweſt bone of the true ſpine, in the ſame manner as the bones above it are connected to each other.

The Sacred Bone is a large triangular immoveable bone. It is broad at the part which joins the true ſpine, and becomes narrow as it approaches the ſmall range of bones attached to it below.

The

The outer ſurface of the Sacred Bone reſembles that of two or three bones of the true ſpine, joined together, by which it affords room for the attachment of ſtrong ligaments, which connect it to the *Haunch Bones* at the ſides, and of ſome of the muſcles which move the thighs, &c.

The bony canal for the ſpinal marrow is continued along the Sacred Bone, till within a little of its lower end: it terminates there by a large opening, which is covered by a ſtrong ligament.

The inſide of the Sacred Bone is ſmooth. It is perforated by four or five holes on each ſide of its middle part, through which nerves paſs.

The ſmall range of bones which terminates the ſpine is called the *Rump-bone*. It conſiſts of three or four pieces joined together by griſtle, capable of motion forewards and backwards.

Theſe bones becoming very ſmall at their lower end, make the ſpine terminate in a point.

The Rump-bone affords room for the inſertion of ſome of the muſcles, which cloſe

the lower part of the trunk, and ſupports ſome of the parts within the belly.

The SPINAL MARROW is named improperly; for it differs very much from the oily ſubſtance called *Marrow*. It is a large thick nervous cord continued from the brain, which furniſhes nerves to every part of the trunk and extremities. The ſpinal marrow is ſo eſſential to life, that wounds of it generally prove fatal. It is therefore defended very ſecurely by being lodged in a bony canal.

In its courſe within the ſpine, the ſpinal marrow ſends off, through openings between the ſides of the bones, and through thoſe of the ſacred bone, thirty pair of large nerves. It terminates in the lower part of the ſacred bone, by being divided into a great number of branches, which go to the lower extremities.

NECK.—The Neck connects the head and the trunk. Its external appearance, from being familiar to every one, requires no deſcription.

Within the forepart of the neck the *Windpipe*, and behind it the *Gullet*, paſs along

long in their courſe from the mouth to their reſpective terminations within the trunk.

The WINDPIPE is the canal through which the air paſſes from the mouth to the lungs. It is compoſed of a great many griſtly rings, having their back part membranous, joined together by ligaments and fleſhy fibres, lined with a fine, delicate, and highly ſenſible ſkin, which is defended from injury by many mucous glands.

The upper forepart of the windpipe is covered by a large gland, the uſe of which has not yet been aſcertained: along each ſide of it the large veſſels are ſituated, which convey blood to and return it from the head.

The GULLET is placed behind the windpipe, between it and the bones of the neck; it is a membranous fleſhy tube which leads from the throat to the ſtomach, and which is capable of contracting ſtrongly.

The inſide of the gullet is lined with a fine ſkin, ſimilar to that which lines the mouth, and defended like it with mucus, poured out by glands placed on its ſurface.

BONES

Bones of the Neck.—The ſeven uppermoſt bones of the ſpine form the Bones of the Neck; the firſt of theſe is attached by an immoveable articulation to the head; the other ſix are capable of motion, backwards, forwards, and from ſide to ſide.

The bones of the neck are leſs, and have a more conſiderable motion, than the other bones of the ſpine; they are alſo ſomewhat flattened on their forepart, to allow room for the gullet and windpipe. In other reſpects they reſemble thoſe of the ſpine.

The Spinal Marrow ſends off ſeven pair of nerves from between the bones of the neck. Some of theſe are diſtributed to the ſides of the head, muſcles of the neck, the windpipe, and gullet, and ſome run down to part of the bowels ſituated within the cheſt. The reſt of theſe nerves running under the armpits, join with other nervous branches to ſupply the arms.

The remaining part of the Neck is compoſed of glands and muſcles, with branches of blood-veſſels and nerves, covered by common ſkin.

The uſes of the principal Glands of the neck are unknown.

The

The Muſcles of the neck are thoſe which perform the different motions of the head, neck, gullet, and windpipe.

CHEST.—The CHEST is a large cavity, in which ſome of the organs moſt eſſential to life are lodged: it is joined to the neck above and the belly below. The Cheſt externally is covered with ſkin, beneath which ſeveral fleſhy portions are ſituated. Theſe perform a variety of functions; for ſome of them move the ſuperior extremities, others aſſiſt in the action of breathing, and a few on the back part are employed to move the trunk of the body.

On the forepart of the cheſt the breaſts are placed. Theſe are deſcribed in another part of this work.

The cavity of the cheſt is formed by part of the ſpine, the ribs, and the breaſt-bone.

TWELVE BONES of the SPINE, continued from the neck, belong to the cheſt; they have at their ſides indentations, into which one end of the ribs is received.

The RIBS conſiſt of twelve on each ſide. Of theſe the firſt ſeven are called TRUE

RIBS,

RIBS, becauſe they join the ſpine and breaſt-bone. The remaining five become gradually ſhorter as they proceed downwards. They are fixed by one end to the ſpine. Their other end affords ſupport to fleſhy parts. Theſe are named BASTARD or FALSE RIBS.

The True Ribs become griſtly at their end next the breaſt-bone. They are articulated with it and the ſpine in ſuch a manner, that they have motion upwards and downwards. In performing theſe motions, the Ribs turn obliquely, by which they are puſhed a little forwards. By this mechaniſm the cavity of the cheſt can be enlarged. Theſe ribs are joined to each other by fleſhy portions, which perform their motions. The nerves and blood-veſſels which ſupply the fleſhy portions, run along the under edge of each rib.

BREAST-BONE.—The ſituation of the Breaſt-bone is well known. It is a long flat bone conſiſting of two or three pieces. At its upper part it is broad; and it terminates in one or two narrow points, which project into the belly. The Breaſt-bone is articulated with the fore-ends of the true ribs.

ribs. It is moved in a certain degree backwards and forwards in conſequence of breathing.

By means of the bones of the cheſt, a kind of cage is formed, which is narrow above and broad below.

The Cheſt is ſeparated from the Belly by a fleſhy partition, called the DIAPHRAGM or MIDRIFF. It is attached to the ends of the falſe ribs, the lower part of the breaſt-bone, the under edge of the laſt true rib, and to the ſpine at the loins.

From the ſituation of this partition, the lower part of the cheſt ſlopes gradually from the end of the breaſt-bone to the bones of the loins. The ſide of the Midriff next the cheſt is convex; that next the belly is hollow.

The Midriff, by its ſtructure, is capable of enlarging or diminiſhing the cavity both of the Cheſt and of the Belly. By its actions on the firſt of theſe cavities, it aſſiſts in breathing, ſpeaking, laughing, coughing, &c. and by thoſe on the latter, it promotes the courſe of the food through the inteſtines.

The cheſt contains the LUNGS with part of the windpipe, the continuation of the gullet, a canal called THORACIC DUCT, and the HEART with its appendages.

The whole cavity of the Cheſt, and the outſide of all its contents, are lined with a very fine, delicate, and exquiſitely ſenſible ſkin, which is kept moiſt by a fluid furniſhed by the exhalents on its ſurface.

This ſkin divides the Cheſt into two cavities, by being doubled and fixed to the ſpine and breaſt-bone. The cavities thus divided are not perfectly equal, for the right one is generally largeſt.

By this contrivance, accidents affecting one ſide of the cheſt do not communicate to the other.

WINDPIPE and LUNGS.—The Windpipe continued from the neck enters the cheſt at the upper part of the breaſt-bone. It proceeds along within the duplicature of the partition of the cheſt, till it arrives at about the fourth back-bone. It then divides into two branches, one of which is ſent to the right, the other to the left ſide.

These branches entering the lungs are divided into innumerable ſmall ramifications, which go to every part of the lungs, and which terminate in ſmall cells capable of admitting the air, and which communicate with each other.

The ſtructure of the Windpipe has been already deſcribed: the griſtly rings keep it open for the conſtant admiſſion of air, and the membranous part modifies the proportion neceſſary on various occaſions, as in ſpeaking, ſinging, &c.

The LUNGS occupy almoſt the whole cavity of the cheſt. They conſiſt of two large portions called *Lobes*, placed in different ſides of the cheſt, and rendered perfectly diſtinct from each other by the partition already deſcribed. The Lungs are of a greyiſh colour, except in children and old people. They are formed of the ramifications of the windpipe, a number of cells, and a great quantity of blood-veſſels, and are alſo ſupplied with lymphatics, blood-veſſels, and nerves, for their own particular œconomy.

The important purpoſes which the Lungs

ſerve cannot be explained till the ſtructure of the heart be exhibited.

Gullet.—After paſſing along the neck, the Gullet enters the cheſt, and goes down in the middle of the ſpine behind the partition. At one part it inclines a little to the right ſide, and then ſomewhat to the left. At laſt it advances forward, and penetrating the midriff, it proceeds towards the ſtomach.

THORACIC DUCT.—A thin, tranſparent, narrow canal enters the cheſt from the belly. It extends along the right ſide of the back-bone as high as the fourth or fifth rib. It then croſſes over to the left ſide, and forming a turn, terminates in a large vein between the firſt and ſecond rib of that ſide.

This canal is called the THORACIC DUCT. It is the reſervoir of the chyle, which it conveys to the vein in which it terminates.

GLAND of the CHEST.—The partition which divides the cheſt ſeparates the one ſide from the other in a ſmall degree at the upper part. In the cavity thus formed a gland called *Thymus*, larger in children than

in

in grown people, is placed, the uſes of which have not been diſcovered.

HEART-PURSE. — The two layers of which the partition is formed leave between them a large cavity extending from about the middle of the breaſt-bone to the midriff. In this cavity the heart is ſituated.

The opening thus made is termed the PERICARDIUM or HEART-PURSE. It ſurrounds the heart nearly on all ſides, and ſerves to retain it in the proper ſituation, as well as to defend it from injuries.

The Heart-Purſe is conſtantly moiſtened by a thin lubricating fluid.

HEART.—The Heart is the great reſervoir of the blood. It is placed within the partition of the breaſt in ſuch a manner that it lies in a ſlanting direction, having its baſe towards the right, and its point to the left ſide, touching the ſixth rib.

The Heart is fixed to its purſe at the baſe and at the under ſide, by which means it lies nearly on the middle of the midriff.

The largeſt portion of the Heart is formed by two ſtrong fleſhy bags joined cloſely together, called *Bellies* or *Ventricles.* Theſe poſſeſs the power of contracting and dilating,

ting, by which they expel the blood from their cavities, which are quite diſtinct, being ſeparated by a ſtrong partition.

The Ventricles are placed in an oblique manner towards the breaſt bone and ſpine; that which is next the former is called the Right, and the other the Left Ventricle.

At the broad end of the heart two ſmall fleſhy ſubſtances, reſembling the ears of a quadruped, are attached to the Ventricles. Theſe are called the AURICLES. The ſituation of the Auricles correſponds with that of the Ventricles. Like them, too, they are hollow, and poſſeſs the power of contracting and dilating.

BLOOD-VESSELS of the HEART.—The Heart, like other organs, is ſupplied with blood-veſſels and nerves for its own œconomy. Beſides theſe, ſome Blood-veſſels go directly into the cavities of the Heart. Of theſe, the Veins belong to the Auricles, and the Arteries to the Ventricles.

CIRCULATION of the BLOOD.—All the Blood collected from every part of the body is brought, by a large vein, into the right auricle, which, contracting, puſhes it forwards into the correſponding ventricle.

tricle. A large artery, leading from the right ventricle, and dividing into two branches ſoon after it leaves the heart, conveys the blood (forced into it by the contraction of the ventricle) into each lobe of the lungs.

The branches of this artery form a great many minute ramifications within the lungs, correſponding nearly with thoſe of the windpipe. By theſe means the blood is diſtributed over the whole ſubſtance of the lungs, and expoſed to the air which is received within the windpipe and cells.

The blood is returned from the lungs by veins. Theſe at laſt form only one large veſſel, which enters the left auricle. The left auricle contracting, forces the blood into the ventricle with which it is united, from which, by the ſame means, it is puſhed into a very large artery, deſtined for conveying it to every part of the body.

At each opening through which the blood paſſes into the Heart, a particular apparatus is placed, which favours the paſſage of the blood in the courſe juſt deſcribed, but prevents its return.

The Great Artery leading from the left

left ventricle, croſſes over the fourth bone of the back, in an oblique manner, towards the right ſide. It then riſes, and forms a curvature or arch at the ſecond bone, and turning down, is continued along the left ſide of the ſpine, till it paſſes out of the cheſt through the midriff.

From the arch of the Great Artery, three or four large veſſels carry blood to the head, face, organs of the ſenſes, the upper extremities, breaſts, &c. The blood is returned from theſe parts by veins, which terminate within the breaſt, on the right ſide of the ſpine, in the large veſſel which enters the right auricle of the heart.

This veſſel, which may be called the *Great Vein*, lies on the right ſide of the great artery, at the back of the partition of the cheſt. It is joined, where it enters the heart, by a ſimilar veſſel, which penetrates the midriff, from the belly, and returns the blood from the lower parts of the body.

USES of the LUNGS.—The Lungs perform the important function of RESPIRATION. By this operation the blood is ſupplied with ſomething neceſſary to life, and alſo deprived of its uſeleſs parts. For

this

this purpoſe it is that the blood is diſtributed through the Lungs in great quantity.

Reſpiration is accompliſhed by the air being, by turns, received into and forced out of the Lungs. The midriff and ribs, by alternately enlarging and diminiſhing the cavity of the cheſt, are principal agents in this operation. The particular circumſtances, however, on which this neceſſary action depends, are not yet clearly underſtood.

By reſpiration alſo the voice is formed. The modulation of ſounds, which conſtitutes ſpeech, is probably produced by the action of the upper part of the windpipe on the air which paſſes from the lungs. The manner in which this is effected is not aſcertained.

BELLY.—All that part of the trunk below the midriff is called the BELLY. Its general external appearance requires no deſcription.

The form of the cavity of the Belly is irregular. At the upper part, it ſlopes from before backwards, by the particular ſituation of the midriff; behind, it ſeems divided

divided into two parts by the jutting in of the ſpine; and below, it is ſurrounded by a bony ring, which gives it ſomewhat the form of a baſon, hence called *Pelvis.*

The PELVIS or BASON is a bony zone, compoſed of the ſacred and rump bones, and two large irregularly ſhaped ones, called *Innominata* or *Nameleſs Bones.* The two former are placed at the back part, and the two latter make up the ſides and the forepart.

The *Sacred Bone* is joined to the laſt bone of the true ſpine, in ſuch a manner that its upper part projects forwards, while the reſt of it, along with the rump-bone, inclines backwards.

The *Nameleſs Bones,* one at each ſide, are fixed to the upper half of the ſacred bone by an immoveable articulation; they are firmly glued together, and their union ſecured, by ſtrong ligamentous bands, at the forepart, in a line directly down from the navel.

Theſe bones, therefore, form a ring, no part of which is capable of motion.

Each of the nameleſs bones is divided, in children, into three portions, joined by griſtle.

griſtle. Though theſe become united in grown people, the names by which they are diſtinguiſhed in their original ſtate are retained by anatomiſts; hence the nameleſs bones conſiſt of the *Haunch*, *Hip* or *Seat*, and *Share* bones.

The firſt of theſe is that which is articulated with the ſacred bone, the ſecond is that on which the body reſts in the ſitting poſture, and the third is that portion placed between the groins.

The *Haunch-bone*, at each ſide, ſpreads upwards and outwards, and forms the ſides of the lower belly. Its upper edge is ſomewhat ſemicircular. It affords room for the inſertion of many muſcles.

At the forepart, above the top of the thighs, its edge becomes irregular, having two projections, to which fleſhy portions are attached.

The under part of the Haunch-bone only belongs to the pelvis properly ſo called. It forms a ridge, which is continued from the top of the ſacred bone, below which it is ſcooped out to make a large notch. Through this opening a great

nerve and blood-veſſels paſs to the lower extremities.

The *Hip* or *Seat bone* extends from below the forepart of the Haunch-bone, to the bumpy part on which the body reſts in ſitting. This part is defended by griſtle.

At its back part the Hip-bone has two projections, to which ligamentous cords, extending from the ſacred and rump bones, are fixed.

The *Share-bones* of each nameleſs bone, joined together as already deſcribed, occupy the ſpace between the groins.

By their upper edge the line formed by the ſacred and haunch bones is continued, and conſtitutes a ring of an irregular figure, called the *Brim*. This ring differs in male and female, both in ſhape and ſize.

At the forepart of the upper edge of each ſhare-bone there is a projection, to which the extremity of the fleſhy portions fixed to the projections of the haunch-bone is attached.

The Share-bones, at their lower part, gradually ſeparate from each other as they proceed downwards to join the hip-bones. By this means an angle or arch is formed between

between them, which is called the arch or angle of the Share-bones.

At the inner ſide of the top of each thigh a large oval hole is formed, ſurrounded by the hip and ſhare bones. This is covered by a ſtrong membrane, through which a nerve and blood-veſſels paſs.

In the middle of the outſide of each nameleſs bone a large round deep cavity is placed, for the reception of the head of the thigh-bone. All the portions of which the *Innominata* conſiſt contribute to form this cavity.

From the deſcription of the conſtituent parts of the Baſon, it will appear evidently that it is of a very irregular ſhape. Its *Brim* lies in a ſlanting direction when the body is erect, the top of the ſacred bone being nearly two inches higher than that of the ſhare-bones.

Its outlet, if the bones alone be conſidered, is a waving line; but when the ligaments which extend from the ſacred and rump bone to the hip-bones are reckoned, it has nearly the ſame figure as the brim.

The great purpoſes which the deficiencies of bone at the lower part of the baſon ſerve, are

are to leſſen the general weight, and to afford a ſafe paſſage to ſeveral important parts.

The Pelvis ſupports the body, allows of the firm attachment of the thigh-bones, and lodges ſecurely within its cavity ſeveral organs.

A number of fleſhy portions, ſtretching from the ribs, and attached to the haunch and ſhare bones, covered with ſkin, form the forepart and ſides of the Belly. By the manner in which theſe are inſerted in the bones of the baſon, an opening is left at each ſide immediately above the ſhare-bones, and another between the projection of the haunch-bone and that of each ſhare-bone. Theſe afford room for the paſſage of blood-veſſels, &c.

The back part of the Belly is made up of the lower bones of the ſpine, and part of the fleſhy portions which move the trunk, covered in the common manner.

The loweſt part of the Belly, or outlet of the baſon, is filled up with fleſhy portions properly covered, which leave openings for the paſſage of the common diſcharges, &c.

The

The whole cavity of the Belly is lined with a fine, ſtrong, ſenſible, ſoft ſkin, lubricated in the ſame manner with that which lines the cheſt. Like it alſo, it covers the ſurface of all the parts within the cavity.

The Belly contains the Organs of Digeſtion, of Urine, and part of thoſe employed for the continuation of the ſpecies. The two former of theſe alone belong to this ſketch.

ORGANS of DIGESTION. — The LIVER, STOMACH, and INTESTINAL CANAL, the SPLEEN, and PANCREAS, are the organs by which the food is digeſted.

The LIVER.—The Liver is a large maſs, of a pretty firm conſiſtence, and a dark red colour, ſomewhat tinged with yellow. It is divided into two unequal portions, called *Lobes*. The ſmalleſt of theſe is ſituated on the left ſide.

When viewed in its natural ſituation, the Liver ſeems to form half a circle below the midriff, placed obliquely from the right to the left ſide, extending in the former direction to the right kidney, and in the latter to the ſecond falſe rib.

The

The Left Lobe of the Liver lies above the ſtomach, between it and the midriff. At its back part it is thick. It gradually bebomes thinner towards the forepart, which can be felt under the breaſt-bone.

The Right Lobe is much larger than the left. It occupies the greateſt part of the ſpace formed by the midriff and falſe ribs on the inſide. It is rounded on the upper part, and hollow below: the back-part is very thick: the forepart terminates in a thin edge.

The Liver is compoſed of a great many blood-veſſels, lymphatics, and ſome nerves, diſpoſed in ſuch a manner as to prepare the BILE from the blood, which is brought to it from the lower parts of the body for that purpoſe.

GALL-BLADDER.—In the concave part of the right lobe of the liver, a ſmall bag, ſomewhat like a pear in ſhape, termed the *Gall-bladder*, is ſituated. The inſide of this bag is wrinkled. It is lubricated by a defending mucus, and it contains the fluid called BILE.

The Bile in the liver is collected in a great many ſmall tubes, which are united, and

form

form a large canal immediately above the Gall-bladder. This is joined by a ſimilar one from that organ.

Theſe two canals make a ſingle conduit, which is inſerted into the inteſtine a little below the ſtomach. By this means the bile is conveyed from the liver and gall-bladder.

The STOMACH. — The Stomach is a large membranous and fleſhy pouch, reſembling in ſhape a bagpipe. It is placed in the ſuperior part of the belly, between the large lobe of the liver and the ſpleen, ſomewhat obliquely, more to the left than to the right ſide. The ſmall lobe of the liver ſeparates the greateſt part of it from the midriff, immediately below the point of the breaſt-bone.

The Stomach has two pretty large openings, the one in the left, the other in the right ſide. The former of theſe is about two or three inches higher than the latter.

The Gullet, penetrating the diaphragm from the cheſt, oppoſite the loweſt backbone, enters the left opening; the beginning of the inteſtinal canal is attached to the right.

The inſide of the Stomach has a number

of folds over its whole surface. These increase towards the left opening, by which, probably, the food is prevented from passing too quickly into the intestines.

The *Gastric Fluid*, or *Fluid of the Stomach*, formerly described, is furnished by an apparatus within that organ, the structure of which has not yet been clearly explained.

The Stomach is supplied with blood-vessels, lymphatics, nerves, &c.

The nerves of the Stomach are so numerous, and have such an extensive influence, that by means of them it has an intimate connection with many of the other organs. From this circumstance, the effect which blows on the head, and disorders of many of the organs within the belly, produce on the Stomach, can be understood. The operation of many medicines, which, by being taken into the Stomach, produce certain changes on the body, in so short a time, that they cannot be applied by the vessels to the parts which they affect, must be attributed to the actions of the nerves of the Stomach.

INTESTINAL CANAL.—From the right opening of the stomach, the Intestine or Gut

Gut proceeds. This consists of a membranous fleshy canal, generally six or seven times longer than the body of the person to which it belongs, terminating at the part through which the coarse part of its contents pass out, called the *Anus*.

The intestinal canal, from being wider in some parts than in others, has been divided into the SMALL and GREAT GUTS. The former of these occupy the upper and forepart of the belly, the latter the lower part and sides.

The intestinal canal, that it may be contained within the belly, makes a great many turns, which are prevented from interfering with each other, by being all bound down to the back-bone, by a thin membranous substance. Through this also the blood-vessels, lymphatics, and nerves are transmitted to the intestines.

A portion of the intestinal canal passes along the inside of the false spine, nearly in a straight line, hence called the *Straight Gut*, or *Rectum*. This gut terminates in the *Anus*, which is surrounded by several fleshy portions, some of which prevent the contents of the intestines from passing out at all

 times,

times, while others force them forward, when neceſſary.

The internal ſurface of the inteſtines, like that of the ſtomach, is highly ſenſible, and has a number of ſmall folds. A great many abſorbent veſſels open into every part of it; and it is defended by mucus, furniſhed by minute glands.

The inteſtinal canal poſſeſſes a power of contracting, by which it propels its contents. It is very ſtrong, in proportion to the layers of which it is compoſed. At the ſame time, its outer ſurface is ſo irritable, that, if expoſed to air, it is very much diſordered.

The SPLEEN.—The Spleen is a bluiſh oval body, five or ſix inches in length, and four or five in breadth. It is ſituated under the midriff, in the hollow made by the falſe ribs of the right ſide, and is connected by ligaments to theſe parts, to the ſtomach, and the pancreas.

The Spleen has ſome nerves and lymphatics. It owes, however, its principal bulk to a great number of blood-veſſels. The uſe of the Spleen is not aſcertained.

The PANCREAS.—Behind the ſtomach, between

between it and the back-bone, a ſmall body, not unlike the tongue of a dog, called PANCREAS, or SWEET-BREAD, is ſituated. This body lies in a tranſverſe direction, one end being connected with the beginning of the inteſtinal canal, the other with the ſpleen. Its breadth is about two or three inches, and its length ſeven or eight.

The Pancreas prepares a fluid ſimilar in quality and appearance to the ſpittle. This is poured into the inteſtine, through a tube, at the part where the conduit from the liver and gall-bladder enters.

A firm, delicate, tranſparent membrane, compoſed of two layers, interlarded with fat, and ſupplied with many blood-veſſels, is attached to the lower part of the ſtomach and ſpleen, and the upper part of the inteſtines. From this it hangs down, quite looſe, nearly to the bottom of the belly, covering the forepart of all the guts.

This membrane is called the *Cawl* or *Omentum*. The purpoſes which it ſerves are not aſcertained.

DIGESTION.—By the proceſs of Digeſtion, food is changed into the fluid formerly deſcribed, called *Chyle*, on a due proportion

portion of which the nouriſhment of the body depends.

The ſenſations of hunger and thirſt remind man of the neceſſity of taking occaſionally meat and drink, and excite dreadful feelings where their ſummons is not obeyed. Drink ſeems more immediately neceſſary to life, as the body can be ſupported much longer without meat than without it, probably from the fluids being ſooner exhauſted than the ſolids.

The food taken into the mouth is broken down and mixed with the ſpittle, by which it acquires a ſoft pulpy conſiſtence. It is ſwallowed by the action of the tongue and ſeveral muſcles, and conveyed along the gullet by the ſucceſſive contraction of the different parts of that organ.

When received into the ſtomach, the food (conſiſting of meat and drink) is mixed with the gaſtric fluid already deſcribed. After it has remained for a certain time, the different parts of which the food was compoſed become intimately united, and form a thick fluid of a greyiſh colour and ſweetiſh taſte, without ſmell.

This paſſes through the under orifice of the

the ſtomach into the inteſtinal canal, by the action of the ſtomach, aſſiſted by the motions of the midriff and the abdominal muſcles.

After it has proceeded about three or four fingers breadth in the inteſtine, the bile and fluid from the pancreas are added, by which it is rendered more liquid, and the different parts of which it conſiſts are more intimately combined.

In this ſtate it is conveyed through the whole extent of the inteſtinal canal, by means of the contractions of that tube, aſſiſted by the midriff, &c.

During this proceſs the thin and fine parts of this fluid are abſorbed, while the thick coarſe parts are puſhed downwards, and thrown out at the anus.

Theſe coarſe uſeleſs parts are expelled by the combination of ſeveral powers; for by the action of the diaphragm and the muſcles of the belly, which compreſs the inteſtines on all ſides, aided by the ſucceſſive contractions of the inteſtines themſelves, they are forced down, to the anus, the muſcles of which being ſtimulated by their

their acrimony, give way, and allow them to paſs.

The immediate manner in which the important function of digeſtion is performed, has given riſe to many diſputes, and is ſtill involved in obſcurity. It cannot be compared to any artificial proceſs which the induſtry of man can contrive.

ORGANS of URINE.—The Organs of Urine conſiſt of the Kidneys and Urinary Bladder.

KIDNEYS.—The Kidneys are two pretty large bodies, reſembling in ſhape a kidney bean, though very much larger. They are ſituated on each ſide of the bones of the loins, between the falſe ribs and the haunch.

The ſtructure of the Kidneys is like that of glands. They receive a great deal of blood, and many nervous branches, which render them exquiſitely ſenſible.

In each Kidney there is a cavity, to which the urine is conveyed by ſeveral ſmall tubes after it is prepared from the blood. From this cavity the urine is ſent into two long narrow canals called *Ureters*, which

which paſs down in a curved direction to the bladder.

Two bodies ſuppoſed to be glands, and hence called *Renal Glands*, are ſituated at the upper part of the Kidneys, between them and the large blood-veſſels. Theſe bodies are larger in children than in grown perſons, in whom they are ſhrivelled. Their uſe has not been ſatisfactorily explained.

URINARY BLADDER. — The Urinary Bladder is placed in the baſon immediately behind the ſhare-bones and before the ſtraight gut. It is a pretty large pouch, ſomewhat oval, terminating in a narrow part called the neck. It is fixed at the lower and forepart to the contiguous parts.

The Urinary Bladder is compoſed of ſeveral layers, one of which being fleſhy, gives it the power of contracting ſtrongly.

The internal ſurface of the bladder is very ſenſible, and defended from the acrimony of the urine by mucus. The neck of the Bladder is ſurrounded by a number of ſmall fleſhy portions, which adapt it for retaining the urine.

The Ureters paſs down in a curved di-

rection from the kidneys, and enter the back part of the bladder nearly at a finger's breadth from each other. The urine is conveyed by them into the bladder drop by drop.

The Urine is expelled from the bladder by the contractions of that organ itſelf, aſſiſted by the action of the midriff and abdominal muſcles.

The Bladder is probably ſtimulated to contract in two different ways, by being diſtended, and by the acrimony of the urine; for when it is very full the deſire for making water is urgent, and this alſo often happens when there is only a ſmall quantity of high coloured acrid urine.

DISTRIBUTION of the BLOOD in the BELLY.—The *Great Artery*, after having penetrated the midriff, runs down along the left ſide of the back-bone till it arrives at the loweſt bone of the true ſpine, where it divides into two branches, which divaricate as they go down, and form a pretty large angle. In its courſe, it ſends branches to the ſtomach, ſpleen, liver, and inteſtines, and alſo to the other contents of the belly. Each of the branches into which it divides

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at the lower part is ſubdivided into two, which are ſent to oppoſite ſides of the baſon; one of theſe on each ſide called *Hypogaſtric*, ſupplies with blood the contents of the baſon, and ſome of the neighbouring parts externally. The other pair goes out under the paſſage made by the muſcles at the top of the thigh, to furniſh the lower extremities.

The *Great Vein* lies exactly in the ſame direction with, and on the right ſide of the Great Artery; it receives the blood from the organs of urine and other contents of the baſon by ſeparate branches. The blood of the ſtomach, ſpleen, and inteſtinal canal, is carried to the liver, where it is taken up by a vein which conveys it to the Great Vein immediately under the midriff at the right ſide.

The blood of the organs of digeſtion, therefore, undergoes a double purification before it is carried to the left ſide of the heart, firſt through the liver, and ſecondly through the lungs.

The *Thoracic Duct* receives chyle from the abſorbent veſſels of the lower extremities, and of the organs within the belly. It lies at firſt under, and then to the right

ſide of the Great Artery, till it penetrates the midriff, as formerly deſcribed *.

EXTREMITIES OF THE BODY.

The EXTREMITIES conſiſt of SUPERIOR and INFERIOR, the former conſtituting the *Shoulders*, *Arms*, and *Hands*; the latter the *Thighs*, *Legs*, and *Feet*.

SUPERIOR EXTREMITIES.—The *Shoulder-blades* are two large, flat, triangular bones, joined to the back part of the cheſt. They extend from the firſt to the ſeventh rib, and accommodate themſelves to the particular ſhape of the ribs.

They are attached to the cheſt by fleſhy bands, in ſuch a manner that they have a conſiderable degree of motion from above downwards, and from ſide to ſide; hence, though in their natural ſituation they are ſeparated by the back-bone, they can touch each other when the arm is moved in a particular direction.

At their upper and outer part they have a hollow ſpace, which receives the head of the firſt bone of the arm.

The Shoulder Blades are prevented from

* See p. 52.

rising

rifing too far upwards by a curved bone, which on each fide extends from their upper and outer corner to the top of the breaft-bone. This is called the *Collar-bone.*

Both ends of the Collar-bone are capable of motion, by which it is not liable to be injured by fudden or violent actions of the arm.

This bone, befides regulating the motions of the fhoulder-blades, provides by its incurvation a fafe paffage for the blood-veffels going to and coming from the head.

The *Arm* extends from the top of the fhoulder to the elbow. It confifts of a fingle long bone joined to the fhoulder-blade, fo as to poffefs a very free motion on all fides. This connection is ftrengthened by the flefhy portions which extend to it from the back and breaft, and perform its various motions. Thefe, covered with fkin, and fupplied with blood-veffels and nerves, give the external form to the Arm.

The fpace included between the Elbow and the Wrift is called the *Fore-arm.* It is compofed of two long bones tied to each other at both ends. Thefe bones are joined

joined to the lower end of the bone of the arm, in ſuch a manner, that, like a hinge, they have only motion backwards and forewards, while at the ſame time one of theſe bones has a rotatory motion.

The *Wriſt* conſiſts of eight ſmall bones placed in two rows; the firſt of theſe is connected with the bones of the fore-arm, by a moveable, hinge-like articulation; and the ſecond is joined to the hand in ſuch a manner, that a ſlight degree of motion only can take place between them.

The Wriſt ſerves as a baſis to the hand, and affords it a large free motion.

The *Hand* conſiſts of four long ſmall bones, four fingers, and the thumb.

The four long ſmall bones are articulated with the wriſt and the fingers, the latter of which they ſupport. They are joined together at each end, and are hollow where they form the palm, and convex at the back of the hand.

The four fingers, each compoſed of three bones, are capable of a great variety of motions.

The thumb, conſiſting alſo of three bones, is articulated with one of the bones of

of the wriſt. It ſerves to regulate the motions of the fingers.

A number of muſcles, covered with ſkin, and ſupplied with nerves and blood-veſſels, make up the figure of the fore-arm, and perform its motions. The wriſt and hand, beſides theſe, have a great many ligamentous cords, which facilitate the complicated motions of which they are ſuſceptible.

INFERIOR EXTREMITIES. — The Inferior Extremities are divided into the *Thighs*, *Legs*, and *Feet*.

The *Thigh* is formed by a very large long bone, covered by a number of fleſhy portions, which perform its various motions. Theſe on the back part attached to the thigh, and the bones of the baſon, conſtitute the *Hips*.

The Thigh-bone has a large round extremity, by which it is fixed in the cavity formerly deſcribed in the nameleſs bones, in ſuch a manner that it has very extenſive motions. The other end is articulated with the legs.

The *Legs* conſiſt of two long bones, ſituated nearly in the ſame manner with reſpect to each other as the bones of the fore-arm,

fore-arm, and poſſeſſing a ſimilar degree of motion.

The Bones of the Legs are articulated with the thigh-bone, nearly as thoſe of the fore-arm are with that of the arm. A thick roundiſh bone, called *Knee pan*, is placed at the forepart of this articulation, having a very free motion upwards and downwards. This bone regulates the motions of the legs.

The articulation between the thigh and leg forms the *Knee.*

The inferior extremity of each bone of the leg projecting ſomewhat outwards conſtitutes the Ankle.

The *Foot* is compoſed of a variety of bones, ſeven of which form the back part of the foot. They are articulated with the bones of the leg, and with one another, ſo as to allow the various motions of the foot; while their back part, compoſed of one large piece, the *Heel-bone*, affords attachment to a ſtrong tendon, which ſtrengthens the articulation.

Five long bones are placed between theſe and the toes. They have no motion between themſelves, but are joined together

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in ſuch a manner as to form an arch along with the bones behind them. By this means a very firm ſupport is afforded to the body, while the blood-veſſels and nerves which ſupply the foot are protected from injury.

The *Toes*, like the fingers, are five in number. The great toe conſiſts only of two pieces of bone; the others have three. The toes, though they have not ſo extenſive a motion as the fingers, are of great uſe in walking.

The inferior extremities are ſupplied, like the ſuperior, with blood-veſſels, nerves, muſcles, ligaments, &c. The ſkin on the ſoles of the feet is thicker and more inſenſible than in any other part of the body.

GENERAL OBSERVATIONS ON THE STRUCTURE OF THE BODY.

ALL the parts of which the human body conſiſts, admirably connected with each other, form a general aſſemblage of powers, by which every purpoſe in life is wonderfully performed.

The *Head* affords a ſituation for the organs of the ſenſes, which adapts them for the important office of ſerving as centinels to announce the approach of danger from ſurrounding bodies, and which renders their influence extenſive.

The *Superior Extremities* act as ſervants and defenders of theſe organs, and are therefore placed near them.

The *Cheſt* is excellently conſtructed for the ſafe lodgement of the powers by which the blood is purified, and ſent to every part of the body.

The *Belly* contains thoſe organs which ſupply the new materials of the body, and carry off the worn-out ones.

The *Inferior Extremities* ſerve as beautiful pillars to the whole human fabric, while they beſtow on it a power of moving from place to place.

The *Whole Body* may be conſidered as the habitation of a certain principle, which animates and regulates every part of it. The inſtruments of this principle are the nerves.

The neceſſary actions of the body after a certain period induce a degree of laſſitude,

tude, which terminates in a total inability of performing the ordinary functions of life. *Sleep* is therefore provided for recruiting the body.

The *Involuntary Actions* of the body are continued during ſleep, but in a ſlower ſucceſſion. The thinking principle, except in caſes of diſeaſe, is quite ſuſpended.

PART I.

MANAGEMENT

OF

FEMALE COMPLAINTS.

CHAPTER I.

OF THE CIRCUMSTANCES IN THE STRUCTURE OF WOMEN WHICH CONSTITUTE PECULIARITY OF SEX.

ALTHOUGH the external form of women, except in certain respects, appears nearly the same with that of men, yet there are some general circumstances in which they differ materially.

Their bodies are commonly of a smaller size, their skin more smooth, their limbs better turned, and their whole frame more delicate and irritable.

These,

Theſe, however, and a variety of other differences, are univerſally known. The great diſtinguiſhing peculiarities in the ſtructure of women, are the Breaſts, the Baſon, and Uterine ſyſtem.

SECTION I.

Of the BREASTS.

THE ſituation and appearance of the Breaſts are ſo obvious, that they require no deſcription.

The Breaſts are of a glandular ſtructure, ſupplied with many lymphatics, blood-veſſels, and nerves, mixed with fat and cellular ſubſtance. In the unimpregnated ſtate, they may be ſaid to be uſeful only as ornaments; but at the end of pregnancy, they furniſh milk for the nouriſhment of the child.

The Milk is prepared by the glandular ſtructure of the breaſts from the blood. It is taken up by a great many minute tubes; theſe terminate in ſeveral ſmall veſſels, which carry the milk to the nipples.

Theſe

These vessels are surrounded by a tough elastic substance, and have their ends corrugated, by which the milk, except it be accumulated in great quantity, is prevented from flowing out spontaneously.

By the operation of sucking these vessels are drawn out, by which they become straight, and therefore no longer impede the egress of the milk, which is propelled into them by the suction.

When the breast is no longer sucked, the vessels regain their former situation, by means of the tough elastic substance which surrounds them.

The breasts have a very remarkable connection with the womb, as they suffer considerable changes when it is affected. This circumstance cannot be altogether explained by the anatomical structure of the breasts.

SECTION II.

STRUCTURE *of the* BASON.

THE lower part of the belly of women is very different from the ſame part in men*, for the cavity called *Baſon* or *Pelvis* in them is much larger.

The Baſon in women is more ſhallow than in men; the ſacred bone is broader and more hollow; the rump-bone, though it projects conſiderably forwards, is very moveable, and can be puſhed back to a line with the extremity of the ſacred bone. The haunch and hip-bones are alſo at a greater diſtance from each other in women than in men, and the arch at the forepart, below the junction of the ſhare-bones, is much wider.

The *Brim* of the female baſon is of an oval figure; it meaſures in the greateſt number of women, from the back to the forepart, nearly four inches, and from

* See deſcription of the baſon in men, p. 58.

ſide

ſide to ſide about five; but as a thick fleſhy portion is extended along its ſide, the greateſt width of the brim in a living perſon is in a ſlanting direction between theſe two.

The *Bottom* of the pelvis has naturally no regular appearance; but in certain circumſtances during parturition it acquires nearly the ſame form and dimenſions as the brim; for it meaſures five inches from the back to the fore-part, and four from ſide to ſide.

The wideſt part of the bottom, however, is exactly oppoſite to the narroweſt part of the brim, for the brim is wideſt from ſide to ſide, and the bottom is narroweſt in that direction.

The depth of the female pelvis varies in different parts. Behind, when the rump-bone is puſhed back, it meaſures ſix, at the ſides four, and before, nearly two inches.

When the body is erect, the brim of the baſon lies in a more ſlanting direction than that of the male, for the upper part of the ſacred bone is almoſt three inches higher than that of the ſhare-bones.

The child paſſes through the cavity of the baſon in parturition; and for that pur-

 poſe

poſe the part which generally paſſes down firſt, *the head*, is admirably adapted to the particular ſhape of that cavity.

The head of a child is oval, and its dimenſions correſpond nearly with thoſe of the pelvis; it poſſeſſes, moreover, a power of being diminiſhed by compreſſion, in conſequence of the bones which form the ſkull being connected to each other very looſely.

When the head paſſes, it in general occupies the leaſt poſſible ſpace; and therefore the part at which the hairs go off in different directions, is always foremoſt, and the largeſt part of the head is uniformly applied to the wideſt part of the baſon.

The head therefore enters the baſon in ſuch a manner that the ears are placed obliquely towards the ſacred and ſhare bones, and is puſhed down in the ſame direction till it arrives at the bottom of the baſon. The longeſt part of the head being then applied to the narroweſt part at the bottom of the pelvis, the poſition muſt be altered before it can proceed farther. This actually takes place; for the face is turned into the hollow of the ſacred bone, and the back-head

towards

towards the ſhare-bones; the arch of the ſhare-bones then receives the back-head, while the face gradually paſſes along the ſacred bone till the whole is protruded.

When the head of the child is at the bottom of the baſon, before it is turned in the manner deſcribed, the wideſt part of the ſhoulders are applied to the narroweſt at the brim, by which means the child could not paſs out in that direction, even although the bottom were wide enough for the paſſage of the head.

When, however, the head is adapted to the bottom of the pelvis, the ſhoulders accommodate themſelves to the dimenſions at the brim, and then, when they arrive at the bottom, they make the ſame turn which the head does.

The ſtructure of a child is ſuch, that every part of the body readily paſſes through an aperture which can admit of the paſſage of the head and ſhoulders.

The Baſon, therefore, is admirably well adapted for parturition. The manner in which the child paſſes through it is a circumſtance with which practitioners ought to be intimately acquainted, before they

they can attempt to afford aſſiſtance during delivery. Many dreadful accidents have been the conſequence of ignorance of this ſubject. Words alone cannot convey ſuch an idea of it as is neceſſary in practice.

SECTION III.

Of the UTERINE SYSTEM.

THE Uterine Syſtem * conſiſts of the *Uterus* or *Womb* itſelf, and its *Appendages.*

The *Womb* is a ſmall hollow organ, ſhaped ſomewhat like a pear flattened, placed in the cavity of the baſon, between the ſtraight gut and bladder. The Womb is divided into the Bottom, the Body, the Neck, and the Mouth. The bottom is the line between the two upper corners; it is placed ſomewhat below the brim of the baſon, and is about two inches in ex-

* The deſcription of the Uterine Syſtem relates only to thoſe organs in the unimpregnated ſtate.

tent.

tent. The mouth is the loweſt part of the Womb; it conſiſts of a ſmall opening, ſurrounded by two pretty thick lips; the appearance, however, of this part varies in different women.

The body and neck, each contributing almoſt equal proportions, form the ſpace between the bottom and mouth.

The ſubſtance of the Womb is fleſhy, but it is more compact than that of any other fleſhy part; it is ſupplied with a number of blood-veſſels, lymphatics, and nerves, which are ſo much compreſſed that their courſe cannot be traced.

The inſide of the Womb is lined with a very fine ſkin, which is ſomewhat wrinkled in young women, particularly towards the neck. The ſtructure of this ſkin is not perfectly underſtood. The extremities of many very minute veſſels can be perceived on its ſurface; and between the wrinkles there are ſmall mucous glands.

From the inſide of the Womb the periodical evacuation proceeds.

In the natural unimpregnated ſtate there is no cavity in the Womb, for the ſides of

of its internal ſurface are every where in contact.

There are three openings in the Womb, two (one at each corner) at the bottom and one at the mouth: the former are always very minute, the latter varies in different women.

Appendages of the *Womb*.—The mouth of the Womb hangs into a canal which ſerves as the paſſage to that organ. This canal, called *Vagina*, being attached to the neck of the Womb, higher at the back than the fore part, forms an angle with it.

The Vagina is a membranous, fleſhy canal, compoſed of ſeveral layers, capable of being conſiderably lengthened and enlarged on different occaſions. Its ordinary length is about four or five inches, and its breadth between one and two.

The layer which conſtitutes the inſide of the vagina being much longer than the other, forms a number of ſmall folds, which are obliterated after frequent child-bearing, &c. This layer has many mucous glands over its ſurface, and is exquiſitely ſenſible.

The vagina, connected to the womb in the

the manner already defcribed, paffes down between the ftraight gut and bladder under the arch of the fhare-bones. It is united with the bladder and the paffage leading to that organ, at the forepart in its whole extent, and in a certain degree at the backpart with the ftraight gut. From this circumftance, diforders in any of thefe parts will be readily communicated to the others.

The fkin which covers the external furface of the womb (the fame with that which lines the whole belly) forms at each fide a broad doubling, named *Broad Ligaments.*

Thefe doublings connect the womb to the fides of the bafon; in fo loofe a manner, however, that they do not prevent it from occafionally changing its fituation. They afford alfo fupport to the blood-veffels, nerves, and lymphatics of the womb.

From each corner of the bottom of the womb two fmall narrow, flefhy canals run along the upper part of the broad ligaments in a curved direction, and terminate

nate at the ſides of the baſon in a fringed ſubſtance, which hangs looſely in the cavity of the belly. Theſe are the *Fallopian Tubes*.

The Fallopian Tubes communicate with the womb at the minute openings of its bottom. In their courſe they gradually enlarge, but at their fringed extremities they again have a very ſmall orifice.

About one inch from the womb, at each ſide, two ſmall bodies are placed in the broad ligaments, reſembling a nutmeg flattened, called *Ovaria.* They are plump, large, and rounded in young healthy women, and become ſhrivelled and ſmall in thoſe who have had many children.

The ſtructure of the ovaria, though certainly glandular, is imperfectly known.

At the forepart of the womb, below the beginning of each Fallopian tube, a round cord, compoſed of veſſels, nerves, &c. intimately interwoven, paſſes down to each groin. Theſe are named the *Round Ligaments.* They ſeem to be principally uſeful

in

in retaining the womb in its proper ſituation *.

SECTION IV.

Of the PERIODICAL EVACUATION.

WOMEN in the unimpregnated ſtate are ſubject to a *certain Evacuation*, which recurs periodically generally every fourth week, more frequently in ſome, and more ſeldom in others.

This diſcharge, called *Menſtruation*, commonly commences about the fourteenth, fifteenth, or ſixteenth year, according to the growth of the body, and of the uterine ſyſtem. It uſually ceaſes ſome time between the fortieth and fiftieth year, ſooneſt in thoſe in whom it appears earlieſt.

The periodical evacuation continues in

* In the former editions of this work, the Uterine Syſtem was minutely deſcribed. The author, however, with a view to render the preſent edition more generally acceptable, has placed the former deſcription in a ſhort Syllabus, which he has printed for the ſole uſe of his female pupils.

general for three, four, or five days, during which time the quantity discharged is from a gill to half a pint. It is, however, liable to considerable variation in quantity and time of duration, in different women, and in different climates.

The commencement of the periodical evacuation introduces an important change in the female constitution. It ought therefore to be viewed as a critical season, which demands a greater share of attention than is generally paid to it. Many diseases, which had previously resisted the power of medicine, often abate or disappear on the regular establishment of that evacuation.

The management of young women at that tender and critical age ought therefore to be particularly attended to.

The revolution which the periodical discharge induces in the female constitution is not effected at once: A number of preceding complaints announce its approach. A general languor and weakness, depraved appetite, impaired digestion, frequent head-ach, and hardness and tightness of the breasts, often distress young women several weeks or months before the discharge appears.

appears. Theſe ſymptoms require the uſe of thoſe remedies which tend to ſtrengthen the general habit, ſuch as nouriſhing diet, ſmall doſes of light bitters, preparations of ſteel, particularly in the form of mineral waters, together with variation of ſcene, and moderate exerciſe in dry open air. At the ſame time, late hours, fatigue from dancing, expoſure to heat, or long confinement in crowded places, and irregularities of every kind, ought to be prohibited in the ſtrongeſt terms.

If, however, notwithſtanding ſuch treatment, or in conſequence of any imprudence, the health ſhould become much impaired, and the body waſted, there is the greateſt reaſon to dread *hectic fever*, a diſeaſe of the moſt alarming nature. Many young women in ſuch a ſituation are daily loſt, from neglect, or from not having early recourſe to the advice of practitioners of midwifery.

After the periodical evacuation has been perfectly eſtabliſhed, its approach is generally announced by one or more of the following ſymptoms. Fulneſs, tenſion, or pain in the breaſts; pain or giddineſs in the

the head; a ſlight degree of nauſeating ſickneſs; pains in the belly and loins ſtriking downwards; heavineſs and weakneſs of the eyes, with a livid circle under the eyelids; together with a general languor.

The greateſt number of women are occaſionally ſubject to ſome of theſe ſymptoms; though a few ſuffer no deviation from their uſual ſtate of health.

When there is reaſon to expect the periodical evacuation, every thing which may diſcompoſe the mind or body ſhould be carefully avoided, particularly paſſions of every kind, and expoſure to cold, or violent exerciſe or fatigue. The food ſhould be plain and ſimple, ſuch as may not overload the ſtomach or diſturb the bowels.

When any of the ſymptoms which precede the diſcharge, ſuch as pains in the head, or back and loins, continue violent for a conſiderable time, the feet ſhould be bathed in warm water, and ſome weak warm white-wine negus or whey ſhould be drank.

There are many diſputes about the *cauſes* and *uſes* of the periodical evacuation: theſe

these ſubjects are inconſiſtent with the nature of this work.

This diſcharge diſappears during the time of pregnancy and giving ſuck.—An idea prevails much, even among practitioners otherwiſe eminent, that women are ſometimes *regular* when with child for the firſt four or five months, or even more. This, however, is a miſtake, for from the nature of pregnancy this is abſolutely impoſſible; caſes indeed from time to time occur, where a trifling *appearance* takes place in the early months. Such diſcharges differ materially, both in their *nature* and *origin*, from the real periodical evacuation, and always indicate ſomething uncommon, and therefore require the attention of a ſkilful practitioner.

Women are ſubject to the periodical evacuation after having given ſuck for a certain time: nature ſeems then to indicate that they are no longer fit for nurſes, and therefore they ought certainly to take the hint. If this be neglected, it is well known the child will ſuffer.

CHAP-

CHAPTER II.

SEXUAL DISEASES.

WOMEN are ſubject to many diſeaſes in conſequence of peculiarity of ſex. Some of theſe, by affecting the capacity of the baſon, impede the delivery of the child; others, by inducing troubleſome ſymptoms, render life uncomfortable; and many, by affecting the general health, prove the ſource of the moſt dangerous ſymptoms.

It is of importance to explain the nature of all thoſe diſeaſes, that thoſe afflicted with any of them may be enabled to apply proper remedies, or have recourſe to proper advice before it be too late.

SEC-

SECTION I.

Deviations *in the* Form *of the* Bason *in consequence of* Disease.

THE human body is ſubject to a diſeaſe of the bones which is peculiar to itſelf, for it has not been diſcovered in any animal. This diſeaſe is ſo great a degree of ſoftneſs in the bones, that their ſhape becomes changed by the preſſure of the different parts of the body. It moſt frequently appears in children, and is in them called *Rickets*. It ſometimes alſo occurs in grown perſons, in conſequence of any tedious lingering diſorder, which very much impairs the conſtitution, and is then named *Softneſs* of the *Bones*.

When females have this diſeaſe, they naturally become unfit for being mothers, as they muſt either, according to the progreſs which the diſeaſe makes, bear children with much difficulty and danger, or muſt be incapable of ever producing a living child.

It

It was formerly remarked *, that the bafon fupports the body; if therefore the bones of which it is compofed become foft, the weight which they neceffarily bear muft unavoidably alter their fhape.

The fituation and form of the facred bone are more frequently changed than thofe of any other bone of the bafon, becaufe in every attitude but lying, it has the greateft weight to fupport.

The foreparts of the bafon are fometimes made to approach the back-part; and it often happens that the feat-bones are forced very near each other. This generally affects the fhare-bones; fo that the fides of the arch between them become nearly clofe to each other.

The rump-bone alfo is liable to be turned to a fide, or crooked up.

Thefe, and a variety of other deviations from nature, in confequence of foftnefs of the bones, diminifh the paffage through which the child muft proceed, in degrees correfponding with the obftinacy and time of duration of the difeafe.

* Introduction, p. 62.

The

The ſame circumſtances are ſometimes the effects of particular occupations of life, as embroidering, &c. where the body is inclined to one ſide, and alſo of thoſe accidents which render that poſture neceſſary.

Deficiencies in the capacity of the bottom of the baſon are eaſily obſerved; but it requires much practice and judgement to diſcover thoſe of the upper opening: on ſuch knowledge, however, the life of mother and child muſt often depend.

Wherever women become pregnant who have had rickets in their youth, or who have narrow haunches, legs ſhort in proportion to their bodies, or who have been at a former period long confined to bed, from rheumatiſm, or any tedious weakening diſeaſe, they have reaſon to dread a difficult labour.

It is therefore an indiſpenſable duty incumbent on every woman in ſuch a ſituation, in ſo far as ſhe ought to regard her own life, and the natural wiſh of becoming the mother of a living child, to put herſelf at once under the care of the moſt eminent practitioner to whom ſhe can have acceſs. From this circumſtance not being attended

to, many unfortunate women are every day loſt, in conſequence of the delay which muſt always take place when *extraordinary* aſſiſtance becomes neceſſary.

Sometimes women have a deficiency of ſpace in the baſon, who are otherwiſe well made. In ſuch caſes, the ſituation of the woman under the care of an ignorant practitioner muſt be dreadful.

SECTION II.

External Sexual Diseases.

WOMEN have ſometimes *Peculiarities* in their *External Form*, which may proceed from original mal-conformation, or be the effects of other diſeaſes.

When there is any thing uncommon in external appearance, that falſe delicacy, ſo natural in women, which often prevents them from conſulting experienced practitioners, ſhould be immediately overcome, otherwiſe they may be ſubject to many inconveniencies which might eaſily be avoided.

The

The following Caſe, which occurred to me ſome time ago, will illuſtrate this obſervation better than any argument which could be adduced.

CASE I.

IN the year 1786, I was called by a very judicious medical practitioner, a few miles from Edinburgh, to viſit a Lady whoſe caſe he ſaid ſeemed very uncommon.

She had been, I learned, for three days in very ſtrong labour; but the child could not be delivered in conſequence of there being no *outlet for it.*

On examination, I obſerved a very ſmall opening, large enough to admit the point of the little finger *only*, ſituated about four or five inches in a direct line above the *Anus.* This had always ſerved as a paſſage for the urine and periodical diſcharge.

The force of the labour pains had preſſed down the child on the fleſhy parts at the bottom of the baſon, ſo that it could be felt diſtinctly through them, by paſſing a finger into the ſtrait gut.

 The

The patient had ſuffered the greateſt agony for three days, during which time a female practitioner attended. When the other practitioner and I were called, ſhe was quite exhauſted, and nearly ſinking.

An opening was immediately made in the direction of the ordinary paſſage; ſhe was ſoon delivered; recovered perfectly; and was afterwards exempt from the inconveniencies which ſhe formerly ſuffered.

Although women be apparently properly formed, the paſſage of the periodical evacuation is ſometimes obſtructed by a firm membrane, which cloſes up the entrance of the vagina.

This preternatural appearance, at a certain period of life, produces the moſt painful and troubleſome complaints; for a tumour or ſwelling is gradually formed, by the accumulation of that fluid which ought to be diſcharged. From the confinement of the fluid, and the puſh which it makes at the accuſtomed periods, the moſt violent

lent bearing down pains will be occaſioned.

Theſe bearing down pains increaſe in violence according to the duration of the complaint, and at laſt, in the advanced ſtage of this diſeaſe, reſemble ſo much the throes of labour, that they have often been miſtaken for it.

This diſeaſe will be readily known by this circumſtance, that the painful ſymptoms diſappear during the interval of the accuſtomed periods.

The cure of this diſeaſe, which is very ſimple, conſiſting only of an inciſion through the obſtructing membrane, muſt be truſted to a ſkilful practitioner.

The external form of women is apt to become changed, by the cohering of contiguous parts, in conſequence of excoriations, or of previous inflammation.

Every part of the body becomes excoriated if expoſed to moiſture and not kept clean; the moſt delicate parts are more particularly liable to this accident.

The great advantage, as well as neceſſity, of the frequent uſe of the *Bidet*, will therefore be very obvious, as it affords the beſt

beſt means for preventing excoriations, and their diſagreeable conſequences.

When excoriations do happen, their treatment ought to be ſimple. If they are ſlight and ſuperficial, the application of cloths dipt in Port wine, or a weak ſolution of ſugar of lead *, will remove the complaint; but if the excoriations have a fiery appearance, and be deep ſeated, they ought to be dreſſed with ſpermaceti ointment, very thinly ſpread on linen.

Inflammation affecting women *externally*, if accompanied with heat, throbbing pain, ſwelling, and tenſion, from having a very great tendency to terminate in extenſive ſuppuration or mortification, ought to be always particularly attended to in the beginning; women ſhould not therefore, in ſuch caſes, delay having recourſe to proper aſſiſtance. If, however, this cannot be procured, violent pain muſt be prevented by doſes of laudanum †, and a poultice con-

* Viz. ten grains diſſolved in half an Engliſh pint of roſe-water.

† The ordinary doſe of laudanum for *grown perſons* is from twenty to thirty-five drops, according to the temperament and ſtrength.

ſiſting

ſiſting of ſoft bread ſoaked in alum water, or a ſtrong ſolution of ſugar of lead ‡, ſhould be applied to the inflamed parts.

In caſes where the inflammation is very violent, blood ſhould be taken from the arm, and alſo by means of leeches from the part.

A particular kind of inflammation is attended with a very troubleſome, though not dangerous ſymptom, *an exceſſive degree of itching*. This complaint, however, is the effect of ſeveral cauſes, which cannot be explained to thoſe who are ignorant of the practice of phyſic. If, therefore, it be not removed by low living, and repeated doſes of cooling ſalts, along with the liberal uſe of ripe fruits, proper advice will be required. The diſeaſe will often be palliated by frequent doſes of laudanum, and the application of ſimple camphorated ointment, or Goulard's cerate, to the affected parts.

‡ Viz. a drachm diſſolved in a gill of vinegar and half a pint of roſe-water.

SEC-

SECTION III.

DESCENT *or* BEARING DOWN *of the* WOMB, *and* PROTRUSION *of the* VAGINA.

THE connections of the womb, it was formerly obſerved *, are ſo looſe, that it readily changes its ſituation.

From this circumſtance it will be underſtood, that if the vagina be very much relaxed or enlarged, the womb will fall lower into it than it naturally does.

When this happens, it preſſes on the neck of the bladder and the lower part of the ſtraight gut, which excites a diſagreeable ſenſation in theſe parts.

The ſymptoms of this complaint in its incipient ſtate, are, bearing down pain, eſpecially when uſing exerciſe, frequent deſire to make water and go to ſtool, and a diſcharge of a ſlimy fluid from the vagina.

* Page 95.

When

When theſe ſymptoms are diſregarded, the diſeaſe continues to increaſe in proportion to its' duration. In many caſes the womb protrudes entirely without the vagina, and then becomes highly troubleſome and painful. It alſo in that ſtate, from its connection with the bladder, renders the unfortunate ſubject of it unable to make water, without lying down and puſhing up the protruded tumour.

The cauſes of the deſcent of the womb ought to be univerſally known, as it is certainly often in womens power to eſcape entirely from the miſerable and uncomfortable ſtate to which they muſt be reduced if ſubject to that complaint.

Every diſeaſe which induces weakneſs of the habit in general, but more eſpecially of the paſſage to the womb, will lay the foundation for the *Bearing down* or *deſcent* of the uterus. Irregularities of the periodical evacuation, frequent miſcarriage, improper treatment after labour, and too early or violent exerciſe after lying-in, are the moſt common circumſtances to which this diſeaſe muſt be attributed.

The cure of *Bearing down* of the womb,

if attended to early, will often be easily accomplished. The tone of the vagina must be restored by the cold bath, and astringent lotions thrown into it three or four times a-day, while at the same time internal strengthening remedies should be taken, and the patient confined very much to a horizontal posture.

When, however, the disease has proceeded so far that the womb *descends*, the cure will be attended with considerable difficulty, and will require time in proportion to the duration of the complaint, and the state of the patient's general health.

Young married women, troubled with descent of the womb, may expect to be entirely relieved from it if they become pregnant, provided they be *properly treated after delivery*.

In cases where there is no probability of pregnancy, the womb should be kept up by means of a piece of sponge adapted to the passage, moistened with any mild astringent liquor, and the remedies advised for *bearing down* of that organ should be carefully employed.

When,

When, however, the descent of the womb is very troublesome, and has continued for a considerable time, the only relief which can be obtained must be procured from the use of an instrument called *Pessary*.

Women in general are prejudiced against such instruments, and many practitioners have recourse to them with great reluctance: some indeed have absolutely prohibited their use, and have alledged that they can never answer any good purpose, but on the contrary, will always increase the malady, and produce other bad effects.

That pessaries have often been the cause of many very troublesome as well as dangerous symptoms cannot be denied, but this can only happen when they are *improperly managed*; for these instruments, when judiciously employed, always contribute very materially, at least to the ease and comfort of the patient, and can never do any harm.

I know at present many women who are enabled, by the use of a pessary, to make every exertion necessary in active life,

life, without feeling the ſmalleſt pain from the inſtrument; while the few who, in the courſe of my practice, have refuſed to try that expedient, ſuffer all the diſagreeable effects which can originate from a weakening diſeaſe and want of exerciſe.

PROTRUSION of the VAGINA.—This diſeaſe is not ſo frequent as deſcent of the womb; but when it occurs, it is fully as troubleſome. It appears in the form of a tumour hanging out without the paſſage, with the mouth of the womb at the upper and forepart of it, which diſtinguiſhes it from the protruſion of the womb.

When the vagina is very much relaxed, and at the ſame time narrow, the weight of the womb bearing down on it will puſh out that part of it which is moſt looſely connected to the contiguous parts *, and conſequently occaſion the appearance already deſcribed.

The cure depends on the protruded part being replaced, and the weakened ſtate of the vagina remedied. Theſe purpoſes will

* See p. 95.

be

be accompliſhed by the means recommended in caſes of deſcent of the womb. As, however, protruſion of the vagina is often the conſequence of general weakneſs of the habit, the Peruvian bark, and mineral waters, with ſteel, ſhould be taken internally, and a ſuitable plan of diet and exerciſe ought to be followed.

SECTION IV.

TUMOURS *in the* VAGINA *and* WOMB.

THE Vagina and Womb are ſubject to fleſhy excreſcences called *Polypous Tumours*, in common with ſome other parts of the body. Theſe in many caſes are ſoft as cloated blood; in others they reſemble fleſh; and ſometimes they are found of a hard conſiſtence. They are of different ſizes and ſhapes.

Little inconvenience is felt from theſe excreſcences when they are ſmall, except from their occaſioning irregular diſcharges of blood from the womb or vagina. But the moſt troubleſome as well as dangerous

ſymptoms occur in the progreſs of the diſeaſe, when the tumour becomes bulky.

Violent bearing-down pain, frequent diſcharges of blood, and the conſtant draining of a fetid, ill coloured fluid from the vagina, along with inability to make water, and irritation on the ſtraight gut, inducing continual deſire to go to ſtool, are the ſymptoms of a large excreſcence in the womb or vagina. When the diſeaſe has continued for ſome time, the tumour hangs at laſt without the paſſage of the womb.

Theſe excreſcences have often been miſtaken for deſcent of the uterus, and ſometimes even for the head of a child. A ſurgeon in Lyons actually tore away, by the utmoſt exertion of force, the womb along with an excreſcence, having imagined that the unfortunate patient was in labour, and that he pulled by a part of the child.

If this diſeaſe be long neglected, the pains will increaſe in violence, and the patient will become emaciated from the continual diſcharges. In the following caſe, the event was more fortunate than could have been expected in ſuch circumſtances.

CASE II.

A young Lady in the country had been ſubject for ſeveral months to violent pains and uneaſy weight at the lower part of the belly, along with conſtant diſcharges of a fetid ill-coloured matter from the paſſage of the womb. She had alſo frequent loſs of blood from the uterus. At laſt ſhe became quite emaciated, and reduced to ſuch a degree of weakneſs that ſhe could not riſe from bed.

This young Lady's caſe was conſidered deſperate, till one of my pupils, who was eſtabliſhed as ſurgeon in that part of the country, was called to viſit her. On his arrival, he found her affected with pains reſembling thoſe of labour; and on examination diſcovered a very large polypous tumour of a firm conſiſtence, ſimilar in bulk and ſhape to a child's head. He had no difficulty in bringing this away, as it was attached by a very ſlender ſtalk. The patient had a complete recovery.

In

In the treatment of excreſcences in the vagina, &c. it is of very great importance to form an accurate idea of the diſeaſe. The ſymptoms, therefore, which diſtinguiſh it from other complaints ought to be well known.

Excreſcences of the womb differ from deſcent of that organ, in being attended with frequent diſcharges of blood, and when felt, in being broad and bulky, and having no orifice like the protruded womb, and in being eaſily moved or twirled round, as it were, by the finger.

If the diſeaſe produced by ſuch excreſcences be early attended to, in many inſtances it can be removed without danger, or occaſioning much pain. But when the excreſcences have acquired a great ſize, the danger is proportionally greater.

The cure depends on a chirurgical operation, which ought only to be attempted by thoſe who have had opportunities of treating ſuch caſes, as it requires a very accurate knowledge of the ſtructure and ſituation of the contiguous parts, to avoid thoſe errors in performing it which have proved fatal to many women.

SEC-

SECTION V.

CANCEROUS AFFECTIONS *of the* WOMB.

ULcerated Cancer of the Womb is perhaps the moſt dreadful diſeaſe to which the human body is ſubject. The unfortunate ſufferer feels conſtant excruciating burning pain in the womb, and has a very fetid acrid diſcharge of matter from the vagina, which excoriates every part which it touches, notwithſtanding the greateſt attention to cleanlineſs, which ought never to be neglected.

At laſt all the parts contiguous to the womb become ulcerated; and the ſituation of the patient is not only tormenting in the higheſt degree to herſelf, but ſhocking to every one about her. Under ſuch circumſtances, death loſes its formidable appearance, and is anxiouſly wiſhed for, both by the unhappy ſufferer herſelf, and by all her friends.

No medicine has yet been diſcovered which can remedy this dreadful diſeaſe, after it has induced theſe ſymptoms. The largeſt doſes of laudanum are ſcarcely ſuf-

ficient

ficient to lull the pain; and every other remedy hitherto tried in ſuch caſes has been found ineffectual.

As, however, the diſeaſe generally exiſts for a conſiderable time before it becomes ſo truly ſhocking, by a proper attention to the ſymptoms, its progreſs may often be retarded, ſometimes even almoſt impeded.

When, therefore, women at the decline of life feel an uneaſy weight, irregular ſhooting pains, attended with the ſenſation of heat, or diſagreeable itching, at the lower part of the belly, they have reaſon to dread threatening cancer. If, at the ſame time of life, any hardneſs be felt about the breaſt, even although there is no pain, future cancer of that organ, or of the womb, (for the one has a remarkable connection with the other), may be expected.

Such ſymptoms require the moſt ſerious attention; for the woman's comfort muſt depend on their proper treatment; and therefore recourſe ſhould be had, on their firſt appearance, to the advice of a practitioner of midwifery.

By a continued perſeverance in a milk and vegetable diet, with a total abſtinence from

from animal food of all kinds, and every fermented liquor, and by occafional blood-letting, and the eftablifhment of one or two iffues in the arms or above the knees, together with frequent dofes of cooling laxative falts, the progrefs of the difeafe may be retarded.

SECTION VI.

DROPSY *of the* APPENDAGES *of the* WOMB.

THE Womb itfelf has been imagined to form the feat of collections of a watery fluid, like other cavities of the body. This, however, can never probably happen, except where the fluid is contained within white-coloured bladders of various fizes, refembling green grapes when too ripe, called *Hydatids*. The nature of thefe bodies is not yet fully underftood. At firft I was inclined to fufpect, that when hydatids were fituated in the womb, they were formed by the retention of part of the *after birth*, or of a blighted conception. But the following cafe overturned this opinion.

Case III.

A Lady at the ceſſation of the periodical evacuation complained of ſymptoms which indicated the exiſtence of a polypous tumour in the womb: And on examination this was found to be really the caſe.

The tumour was eaſily removed; and the patient recovered perfectly.

About ten years afterwards the Lady began to feel an uneaſy weight at the lower part of the belly, and ſuſpected that her former complaint had returned. The mouth of the womb, however, was found quite cloſed up; but the uterus appeared bulky and heavy. This appearance continued for ſome time, attended with no other inconvenience than what originated from the ſenſation of a conſiderable weight, which produced a degree of bearing-down.

At laſt, in the 62d year of her age, this patient was ſeized with very ſtrong forcing pains in the womb; and a large maſs, weighing above two pounds, conſiſting of a quantity of hydatids, joined together by a membranous ſubſtance, was paſſed.

During

During the violent pains which preceded the expulſion of this maſs, the patient loſt ſo great a quantity of blood from the womb, that faintings were induced, and ſhe became very much weakened. After a few weeks, however, by proper management, ſhe recovered perfectly.

The appendages of the womb, called *Ovaria* *, are very frequently the ſeat of dropſy. This diſeaſe moſt commonly occurs at that time of life when the periodical diſcharge naturally becomes irregular, though it ſometimes appears in young women.

At firſt, dropſy of the ovarium is very ſmall, and attended with no diſagreeable ſymptoms. It increaſes gradually in bulk, and is originally confined to one ſide only, moſt generally the left one. The patient enjoys uſual good health in moſt caſes till the tumour has acquired a conſiderable ſize; it then induces pain in the thigh cor-

* See p. 96.

reſponding

refponding with the fide in which the fwelling is fituated, and by degrees the body becomes wafted, the appetite bad, and confequently the patient's ftrength is impaired.

When the fwelling has increafed fo much as to enlarge the whole belly, breathleffnefs, and cramps of the thighs and legs, are produced, which at laft terminate the woman's life.

The progrefs of this difeafe, however, is not equally rapid in all cafes. Some women have had dropfical ovaria upwards of twenty years, without feeling much inconvenience from them. Of this I once faw a very remarkable inftance: the patient was at laft fuddenly carried off by the fluid burfting into the cavity of the belly. In others, the dangerous fymptoms proceed with rapidity to their fatal termination.

Every thing which tends to retard the action of the veffels of the body proves a caufe of dropfy.

It was obferved *, that a thin fluid is furnifhed by the arteries, which lubricates the

* Introduction, p. 6.

furface

ſurface of every cavity of the body. If the proportion of this fluid be too great in any of the cavities, either from being ſupplied in too large quantity, or from not being regularly abſorbed, it will gradually accumulate, and form dropſy.

Although the ovaria in their natural ſtate have no cavity, as they are of a ſpongy texture, they are calculated for allowing the ſtagnation of fluids, while their outer covering is capable of a very great degree of diſtention, and hence readily becomes a ſac for containing the accumulated fluid.

Every circumſtance, therefore, which is apt to impede the circulation of the blood, or to weaken the general habit, but more eſpecially the uterine ſyſtem, may occaſion dropſy of the ovaria. Conſequently too tight lacing, with a view to acquire a fine ſhape, ſedentary life, frequent diſcharges of blood from the womb, and injuries during labour, lay the foundation for this diſeaſe.

Dropſy of the ovaria ought to be carefully diſtinguiſhed from general dropſy, and from pregnancy; if it be miſtaken for

for the former, the patient may be teaſed with medicines which will rather aggravate than relieve the diſeaſe; and if the latter be taken for this complaint, the moſt fatal conſequences muſt follow. Many women have loſt their lives by ſuch miſtakes.

Dropſy of the ovarium is in general ſeldom diſcovered early enough to admit of a complete cure. The great aim, therefore, in moſt caſes, ought to be to prevent its progreſs.

For this purpoſe, every means which can promote general health ought to be employed.

Diuretic medicine and gentle laxatives ſhould alſo be taken from time to time. Nitre, cream of tartar, and an infuſion of juniper berries or of broom-ſeed, ſeem to be the beſt diuretics; and any of the laxative cooling ſalts may be uſed to keep the belly gently open. Theſe remedies are ſerviceable only in preventing the watery fluid from increaſing in quantity, for there is little probability that it can be evacuated by the power of any medicine.

When

When the ſymptoms of breathleſsneſs and very great debility become urgent, the water may be taken off by the operation of tapping. A temporary relief only, however, will in general be obtained by this means, for the fluid will be ſoon again accumulated in increaſed quantity.

In ſome rare caſes, where the general health of the patient remained unimpaired, by the uſe of ſtrengthening remedies the diſeaſe has been prevented from returning after tapping; and hence patients, under ſuch circumſtances, ſhould not altogether deſpair.

The fluid in dropſical ovaria, however, is more often contained within hydatids than within a ſingle ſac, and therefore much leſs can be expected from medicine. This may be known from the inequality of the tumour. It is of conſequence to diſcover the exiſtence of hydatids, as in ſuch caſes little benefit can be procured from an operation.

Fortunately, where hydatids occaſion the ſwelling of the ovaria, the bulk of the tumour in general does not increaſe ſo rapidly as in caſes of ſimple dropſy of theſe organs.

SECTION VII.

IRREGULARITIES *of the* PERIODICAL EVACUATION.

IT is well known, that thoſe women are moſt healthy who have the periodical diſcharge moſt regularly; and, on the contrary, that thoſe who have bad health, either have it *exceſſively*, *ſparingly*, *irregularly*, or *want it altogether*.

Hence it has been ſuppoſed to be ſo much connected with health, and ſo eſſential to the female conſtitution, that irregularities of that evacuation prove the ſource of moſt of the diſeaſes incident to the ſex. In general, however, theſe are more frequently the *effects* of ſomething faulty in the habit, than the *cauſe* of the bad health which at that time occurs.

Women of faſhion, and of a delicate nervous conſtitution, are ſubject to ſickneſs, head-ach, and pains in the back and loins, during the periodical evacuation.

Thoſe

Thoſe of the lower rank, inured to exerciſe and labour, and ſtrangers to thoſe refinements which debilitate the ſyſtem, and interrupt the functions eſſential to the preſervation of health, are ſeldom obſerved to ſuffer at theſe times, unleſs from general indiſpoſition, or a diſeaſed ſtate of the womb.

Women ſubject to pain, &c. while out of order ſhould be cautious what they eat or drink at that period. They ſhould frequently repoſe on a bed during the day, when oppreſſed, languid, or pained. They ought to drink moderately any warm diluting liquor which is moſt grateful to the ſtomach, as gruel, weak white-wine whey, cow-milk whey, penny-royal or balm tea, &c. and muſt carefully guard againſt cold, fatigue, and night irregularities.

The pains with which many women are ſo much diſtreſſed during this period are beſt relieved by opiates. Fifteen drops of laudanum may be taken in a cupful of warm tea in the morning, and twice that quantity in weak negus, white-wine whey, or gruel, at night, immediately before bed-time.

 The

The tendency to conſtipation which opiates induce, muſt be counteracted by the uſe of gentle laxatives or emollient glyſters.

Women who are nervous and delicate, whoſe health has been impaired by frequent miſcarriages, or whoſe conſtitution is weakened by a ſedentary inactive life, low diet, or any other cauſe of debility, are chiefly ſubject to *immoderate*, *long continued*, or *frequent* menſtruation.

When the blood evacuated, inſtead of being purely fluid, comes off in large clots or concretions, attended with a conſiderable degree of pain, throbbing, or bearing down, the caſe is highly alarming and dangerous, for it indicates a diſeaſed ſtate of the womb, as the periodical diſcharge, in its natural ſtate, never coagulates.

Frequent or exceſſive evacuations are always attended with languor and debility, and loſs of appetite, with pain in the loins, and ſometimes faintings; and when they occur in a violent degree, anxiety, coldneſs of the extremities, and hyſteric fits are occaſioned.

Univerſal

Univerſal weakneſs of the ſyſtem, which brings on a train of nervous complaints, and ſwelling of the legs, and a diſpoſition to hectic fever, which may at laſt terminate fatally, are the conſequences of frequent or exceſſive menſtruation.

The cure depends much on the cauſe, the conſtitution and manner of life of the patient. More in general is to be expected from regular living and proper diet and exerciſe, than from medicine.

When the diſcharge is exceſſive and dangerous, cooling diet, cool air, horizontal poſture, and cold *topical* applications, are the principal remedies. The patient ſhould be kept as cool as poſſible, and perfectly at reſt, both in body and mind, as long as the diſcharge continues. Her food ſhould at that time be light and nouriſhing, but not heating, and ſhould be quite cold. When great anxiety, languor, and faintneſs occur, light nouriſhment muſt be frequently given, and now and then a little cold claret or cinnamon water, by way of cordial.

The diſcharge cannot be immediately ſtopped by any internal medicine; but it

may

may be moderated, and hence the danger of the complaint will be obviated.

With this view, if the patient is of a full habit, hot or feverifh, the nitrous mixture * will be moft proper; but otherwife, rofe-tea, agreeably fharpened with fpirit of vitriol, is preferable. Alum-whey is alfo a powerful remedy, and readily procured. The eighth part of an ounce of alum will curdle an Englifh pint of milk; the whey thus prepared muft be fweetened to the tafte, and a fmall cupful may be drank as often as the ftomach will receive it.

When there is much pain or anxiety, opiates may be given with advantage.

The ftate of the belly muft be attended to; it can be kept gently open by the ufe of caftor oil †, or any mild laxative. Glyfters under fuch circumftances are improper, from their tendency to increafe the difcharge.

A light decoction of peruvian or oak bark ‡, rendered acid to the tafte by elixir

* See forms of medicine at the end of this work.

† The dofe for a delicate woman is a table fpoonful.

‡ See forms of medicine.

of

of vitriol, is the beſt remedy to ſtrengthen the general habit, and to prevent a return of the diſorder.

When the periodical evacuation is ſparing, the beſt palliative treatment is to guard againſt expoſure to cold at that period, and by the uſe of the warm bath to promote the diſcharge.

Irregular recurrence of the ſexual evacuation may be occaſioned by a variety of circumſtances; but it moſt frequently happens from general indiſpoſition, or in conſequence of the particular period of life.

Where ſymptoms indicating diſeaſes of the habit, as weakneſs, loſs of appetite, ſwelled legs, &c. occur at the ſame time with irregular evacuation, they alone ſhould be attended to, for on their being remedied the return of the ſexual diſcharge alone depends.

When irregularities occur about the forty-fifth or fiftieth year, it muſt be imputed to the natural decline of life, and ought to be treated as ſuch. Many women on theſe occaſions, averſe to be thought old, flatter themſelves that the irregularity is occaſioned

occaſioned by cold, or ſome accidental circumſtance, and therefore, very improperly, employ their utmoſt endeavours to recall it.

When the periodical evacuation is about to ceaſe, the ſymptoms which occur are extremely different in different women; for in ſome it ſtops at once, without any bad conſequence; in others it returns after vague and irregular intervals, for ſeveral months or years preceding its final ceſſation. In ſuch caſes it has at one time the appearance of little more than a ſhew; at another it comes on impetuouſly, and continues for ſome time exceſſive.

The ſymptoms of diſeaſe which in many women occur at this period of life, are to be aſcribed rather to a general change in the habit, than merely to the abſence or total ceſſation of the ſexual evacuation.

Although this change is natural to the female conſtitution, if the many irregularities introduced by luxury and refined life be conſidered, it will not appear ſurpriſing that this period ſhould prove a frequent ſource of diſeaſe.

Women who have never had children, or good regular health, and thoſe who have

have been weakened by frequent miſcarriages, are moſt apt to ſuffer at the decline of life.

It frequently happens, that women who were formerly much pained when out of order, or who were troubled with nervous and hyſteric complaints, begin at the ceſſation of the periodical diſcharge to enjoy a good ſtate of health, to which they had formerly been ſtrangers.

If the evacuation ſhould ſtop at an earlier period of life than uſual, and the woman is not pregnant, the nature of the ſymptoms will point out the proper management.

When no particular complaint occurs in conſequence of the decline of life, it would be exceedingly abſurd to reduce the ſtrength by an abſtemious diet, low living, and evacuations, as is unfortunately very often adviſed.

If, on the contrary, headach, fluſhings of the face and palms, or an increaſed degree of heat, reſtleſſneſs in the night, and violent pains in the belly and loins, are occaſioned at this period, there is reaſon to believe that a general *fulneſs* exiſts, in conſequence

ſequence of the ſtoppage of the accuſtomed diſcharge.

When, therefore, theſe ſymptoms occur, or when the legs begin to ſwell, or eruptions to appear in different parts of the body, ſpare living, with increaſed exerciſe, occaſional blood-letting, and frequent gentle purgatives, ought to be recommended.

The periodical evacuation ſometimes, in young women, ſuddenly diſappears for a period or two, and in ſome caſes much longer.

This circumſtance always occaſions much apprehenſion, and every medicine which is imagined to poſſeſs the power of reſtoring the diſcharge is therefore very eagerly had recourſe to.

As many occaſional cauſes may put a ſtop to the periodical evacuation, the method of cure muſt be varied according to circumſtances. If the complaint ſeems to have originated from expoſure to cold, errors in diet, or paſſions of the mind, the warm bath ſhould be uſed for ſeveral nights preceding the time when the diſ-

charge

charge ſhould appear, and a gentle vomit or laxative ought to be taken.

If the woman has evident troubleſome ſymptoms of *fulneſs*, blood-letting, frequent doſes of cooling laxatives, and ſpare living, will prove the moſt effectual remedies, and are certainly ſafe, as the ſame treatment would be proper though there were no *obſtruction*.

A very different plan ought to be purſued when there are ſymptoms of great weakneſs. Nouriſhing diet, the moderate uſe of wine, gentle exerciſe, the peruvian bark, a courſe of ſteel mineral waters, and the cold bath, will in ſuch caſes be neceſſary. A table ſpoonful of white muſtard ſeed evening and morning, or a ſmall cupful of a weak infuſion of horſe-radiſh, on ſuch occaſions, ſometimes produce very good effects; an infuſion of camomile, tanſey, balm or penny-royal, may be employed with the ſame views.

From the great variety of cauſes of ſexual obſtruction, it is certain that many medicines which poſſeſs very oppoſite powers, may in different caſes produce the

ſame effects; for the ſame reaſon, a remedy which in one caſe may prove mild, inoffenſive, and ſucceſsful, will, in another apparently ſimilar one, occaſion the moſt violent diſorders.

Medicines, with a view to reſtore the periodical evacuation, ought therefore to be employed with the greateſt caution. No remedy applicable to every caſe can poſſibly be diſcovered; and many caſes yield to a proper regulation of diet and exerciſe, after having reſiſted all the ordinary remedies.

All forcing medicines ſhould be carefully avoided, as they act by ſtimulating other parts, and hence their effects are often dangerous, and never certain.

Electricity has frequently been found a powerful remedy in caſes of obſtruction; but as it may often be productive of the very worſt effects, it ſhould never be had recourſe to without proper advice.

SECTION VIII.

Sexual Weakness.

WOMEN are very much liable to a discharge of a ſlimy mucus, from the paſſage leading to the womb, which varies conſiderably in appearance, conſiſtence, and quantity, in different caſes.

This complaint is always diſagreeable and troubleſome, and frequently occaſions great weakneſs, and a train of nervous diſorders; as it is alſo the diſeaſe to which women are moſt peculiarly ſubject, it muſt form an important object of attention.

Sexual weakneſs, or *Whites*, as it is vulgarly called, proceeds either from the vagina or from the ſame ſource as the periodical evacuation. In the former caſe it ought to be conſidered merely as a local complaint; but in the latter it is very much connected with the general health.

In the internal ſurface of the vagina, it has already been obſerved *, there are ma-

* See p. 94.

ny

ny mucous glands; theſe furniſh a liquor by which that canal is conſtantly lubricated. When theſe glands prepare too great a quantity of mucus, the ſuperfluous proportion is naturally diſcharged, and conſtitutes the mildeſt ſpecies of ſexual weakneſs.

In this caſe, the fluid diſcharged has a glairy appearance, ſomewhat like thin ſtarch. It is attended with no pain, and does not affect the health in the ſmalleſt degree.

This diſeaſe is troubleſome only from the diſagreeable ſenſation which it induces: it may be readily removed by proper attention.

The cauſe of this complaint is an *irritation* of the mucous glands of the vagina: hence it is occaſioned by the bearing down of the womb, and by every other circumſtance which can irritate the vagina, ſuch as polypous tumours, &c.

The cure will be accompliſhed by removing the irritating cauſe, and by the uſe of the cold bath.

When, however, the diſcharge is of a

yellow

yellow colour, or is thin and fetid, it certainly is owing to conſtitutional diſeaſe.

Too great a degree of fulneſs, in conſequence of high living, inactivity, or the peculiar diſpoſition to corpulency, which ſome women have at a certain period of life, frequently occaſions an increaſed action of the glands in the inſide of the womb.

This may be known by the attending ſymptoms. If there are violent pains in the head, back, and loins, together with fluſhings in the face and palms of the hands, and if the pulſe be ſtrong and full, there can be no doubt of the cauſe.

The diſcharge under ſuch circumſtances can only be removed by repeated blood-letting, ſpare living, and general evacuations, by means of laxative medicines.

In theſe caſes the uſe of aſtringents would be productive of the worſt effects.

When a thin diſcharge of a greeniſh or dark colour proceeds from the vagina,

chiefly

chiefly a few days before and after menſtruation, and diſappears during that evacuation, it then proceeds from the ſame ſource as it.

When this complaint continues for a conſiderable time, it gradually weakens the general habit, and in a particular manner affects the ſtomach. It tends alſo very materially to impair the functions of the uterine ſyſtem; and hence women ſubject to this complaint are always barren as long as it continues.

This ſpecies of ſexual weakneſs will yield only to ſtrengthening remedies, and the uſe of topical aſtringents.

With theſe views, the ſtomach muſt be emptied once or twice by vomits *, after which the peruvian bark, either in ſubſtance or decoction, with elixir of vitriol, alternated with the uſe of tincture of ſteel, may be had recourſe to with ſucceſs.

The cold bath (in the ſea when the ſeaſon will permit), along with the topical application of aſtringent liquors, by

* See forms of medicine.

means of a ſyringe made of the elaſtic gum, ought alſo to be employed. The moſt convenient aſtringent lotions are, a ſtrong infuſion of green tea, port-wine and water, or the ſtrong ſolution of ſugar of lead already mentioned *.

Along with theſe remedies, light nouriſhing diet and moderate eaſy exerciſe will be beneficial.

This particular kind of the diſeaſe ſometimes happens before the complete eſtabliſhment of the periodical evacuation; in ſuch caſes, it ought to be left entirely to nature, unleſs diſagreeable ſymptoms attend it.

When any diſcharge from the paſſage of the womb is accompanied with inflammation, burning heat, difficulty or pain in making water, troubleſome ſenſation of itching, &c. more eſpecially towards the decline of life, immediate recourſe ought to be had to an experienced practitioner.

* Page 111.

SECTION IX.

STERILITY.

IT is a miſtaken idea, that nature has intended that all women ſhould be mothers; for ſome have original imperfections in the uterine ſyſtem, which cannot be remedied by any operation of art, and which remain often concealed till after death.

Sterility can be obviated only in thoſe caſes where it is the conſequence of irregular menſtruation, from improprieties in the manner of living, or from long continued female weakneſs proceeding from the ſame cauſe.

As the proper treatment neceſſary in caſes of ſterility, from ſuch cauſes, is an object of great importance, as it muſt conduce to the re-eſtabliſhment of the health of the woman, as well as to the advantage of mankind, recourſe ſhould always be had to the advice of practitioners of eminence.

SEC-

SECTION X.

Hysteric Affections.

WOMEN, it has been obſerved *, are more irritable than men. From this circumſtance, they are ſubject to a diſeaſe which appears under very different forms in different perſons, called *Hyſterics.*

A regular hyſteric fit is attended with ſymptoms which ſeem to indicate very great danger; it does not, however, ſo often occur, as complaints which have obtained the ſame name, but which depend on a different cauſe.

In the regular hyſteric fit, the patient is firſt ſeized with a pain in the left ſide, which gradually affects the whole belly; this is ſometimes preceded by or accompanied with ſickneſs and vomiting. By degrees a ſenſe of ſuffocation is felt in the throat, which ſeems to be occaſioned by the ſen-

* See p. 85.

ſation of a ball mounting up to it from the ſtomach.

Theſe ſymptoms are commonly attended with violent ſudden fits of crying and laughing, the tranſition from the one extreme to the other being rapid and unexpected, and by convulſive motions of the whole body. They are often followed by ſtupor and faintings, from which the patient gradually recovers, after having for a conſiderable time ſighed deeply.

After the fit, the patient is not conſcious of what had happened.

This diſeaſe occurs moſt frequently about the time of the periodical evacuation. Women who are ſtrong, robuſt, healthy, and full, or inactive, and thoſe who feed highly, and are ſubject to profuſe menſtruation, are moſt liable to this complaint. It generally attacks them from the age of fifteen to thirty-five.

The cure of *real* hyſteric fits can only be accompliſhed by regular ſpare living, a careful attention to the ſtate of the belly, and by the uſe of thoſe means which have been recommended to promote the periodical evacuation.

The

The ſymptoms which immediately conſtitute this diſeaſe will be removed by blood-letting and a briſk purgative, along with the warm bath. The firſt of theſe remedies muſt be employed before the others.

If the ſtomach ſeems loaded, or if the patient has any tendency to vomit, chamomile tea, with a few drops of hartſhorn, or a doſe of Ipecacuan, ſhould be exhibited.

Thoſe who have been ſubject to this diſeaſe are often troubled with threatening ſymptoms of it, eſpecially when expoſed to cold, or ſuddenly affected with any violent emotion of the mind. Bathing the feet in warm water, the horizontal poſture, and drinking a little warm white-wine whey or negus, will prevent the progreſs of the diſeaſe in many caſes.

Women who are of a very delicate irritable conſtitution, whoſe feelings are acute, and whoſe habit is weak, are often attacked with ſymptoms which reſemble ſome of the hyſteric ones. Theſe complaints have vulgarly been termed *Nervous*, an expreſſion

ſion which is perhaps properly applicable to them, as they generally proceed from an affection of the nervous ſyſtem.

Theſe ſymptoms can be diſtinguiſhed from thoſe attending hyſteric affections, by their being leſs violent, by their occurring at vague irregular intervals, ſeemingly unconnected with the periods of menſtruation, and from their affecting only women of weak irritable relaxed habits.

The treatment of theſe *nervous* diſorders muſt be very different from that of hyſterics; for the remedies neceſſary in the former would prove highly improper in the latter.

Theſe complaints require the employment of every means which can ſtrengthen the ſyſtem, along with variation of ſcene, and agreeable chearful company.

The uſe of opiates in theſe diſorders is more beneficial than in the real hyſteric affections, though in both they muſt be occaſionally had recourſe to, to palliate troubleſome ſymptoms.

CHAP-

CHAPTER III.

PREGNANCY.

THE particular manner in which Pregnancy takes place has hitherto remained involved in obſcurity, notwithſtanding the laborious inveſtigations of the moſt eminent philoſophers of all ages.

ALTHOUGH Pregnancy is a ſtate which (with a few exceptions) is natural to all women, it is in general the ſource of many diſagreeable ſenſations, and often the cauſe of diſeaſes which might be attended with the worſt conſequences, if not properly treated.

It is now, however, univerſally acknowledged, that thoſe women who bear children enjoy uſually more certain health, and are much leſs liable to dangerous diſeaſes, than thoſe who are unmarried or who prove barren.

SEC-

SECTION I.

CHANGES *produced on the* WOMB *by* IMPREGNATION.

IN consequence of impregnation the womb suffers very considerable changes in Size, Shape, Situation, and Structure.

These are very different in the early and latter months of pregnancy, and therefore require a separate description.

In the *Early months* the size of the womb is not much augmented, for about the fourth month it is not so large as to be felt by applying the hand on the belly.

Its shape is chiefly altered at the bottom, which becomes rounded, and rises considerably above the broad ligaments. Between the fourth and fifth month its shape and size resemble pretty nearly an ordinary sized Florence flask, somewhat flattened.

The

The Situation of the womb during the early months is not materially altered, for it remains within the cavity of the bafon till the fourth month, when it begins to afcend. Before that time, from its increafed weight, it finks rather lower than naturally, and hence produces an irritation on the neighbouring parts, which explains fome of the complaints during that period.

The Structure of the womb in the early months is confiderably changed; its *mouth*, from a very fhort time after impregnation, is clofed up with a glairy fubftance, which prevents any thing from paffing out of or into it; this confirms the opinion refpecting the impoffibility of menftruation during pregnancy, which has been already advanced *.

The fubftance of the womb at this time becomes fpongy at the bottom, and the blood-veffels which enter at that part are gradually enlarged in fize, though they are not fo large, till after the fifth month,

* Page 132.

as to be capable of admitting much blood.

After the fifth month the womb increases rapidly in size, and can then be felt plainly by the hand applied externally. Between the eighth and ninth month it is so large as to be twelve or thirteen inches in length, and eight or nine in thickness at its broadest part.

The shape of the womb, in the later months, is somewhat oval. It acquires this form, however, by degrees; for till the sixth month its neck remains as in the unimpregnated state; after that time it gradually becomes enlarged, and at last its former appearance is entirely obliterated.

The broad ligaments remain nearly in the same situation which they possess in the unimpregnated state, for they are no higher than about three inches from the mouth of the womb; hence the greatest portion of that organ, at full time, is attached to none of the surrounding parts, and is therefore unsupported.

The

The round ligaments ſeem to be very much ſtretched in the later months.

The ſituation of the womb after the fifth month varies conſiderably. It aſcends by degrees as high as the pit of the ſtomach, at which it arrives a little after the eighth month; and then it again ſinks in ſuch a manner, that immediately before labour comes on, in many caſes the belly appears quite leſſened or flat.

The changes on the neck and on the ſituation of the womb have been conſidered as marks by which the exact period of pregnancy can be aſcertained; but as the neck undergoes more rapid changes in ſome caſes than in others, and as the womb riſes higher in firſt than in ſubſequent pregnancies, and varies alſo according to the ſhape of the woman, little dependence can be placed on ſuch circumſtances.

When the womb riſes as high as the pit of the ſtomach, it occupies nearly the whole cavity of the belly, and by puſhing the inteſtines behind and to the ſides, it

compreſſes them very much, which occaſions many complaints at that period.

The ſtructure of the womb in the latter months is very different from what it is in the unimpregnated ſtate. It is of a very lax ſpongy texture, eaſily torn; and hence there is the greateſt neceſſity for the moſt cautious management during labour, otherwiſe the child, under certain circumſtances, may eaſily be puſhed through the ſubſtance of the womb into the cavity of the belly, an accident followed by the moſt alarming conſequences.

The *blood-veſſels* of the womb, after the fifth month, increaſe very conſiderably in ſize, eſpecially at one part; and therefore a diſcharge of blood from the womb after that period is always extremely dangerous, as the veſſels are then capable of pouring out a very great quantity.

SECTION II.

CONTENTS *of the* WOMB *during* PREGNANCY.

THE child would be expoſed to many hazards, in conſequence of the various exertions which women muſt neceſſarily make during pregnancy, were it placed in the womb without any defence. Nature has, however, provided a moſt beautiful apparatus for protecting it from ſuch dangers.

The child, when in the womb, is included within a bag formed by three membranous layers, and is ſurrounded by a watery fluid, which prevents it from being affected by external injuries.

The outer of theſe layers is thick and brittle; it is attached to the whole internal ſurface of the womb, and receives blood from that organ.

The

The other too layers ſeem to belong exclusively to the child, as they are found to envelope it in caſes where it is not contained within the womb. They are tranſparent and ſtrong, and have no viſible blood-veſſels.

THE child is connected with the mother by a thick ſpongy maſs, which differs in ſize and ſhape in different caſes, called the *Placenta*, *Cake*, or *After-birth*.

The cake lies between the outer and two inner layers of the bag in which the child is contained: its ſurface next the mother is covered with the former, and its other ſurface with the latter.

The external ſurface of the cake is very ſpongy, and receives blood from the arteries of the womb, which penetrate into its ſubſtance. The blood is returned to the womb by large veins.

The internal ſurface of the cake is quite diſtinct from the external; it is compoſed of a very great number of blood-veſſels, which divide into exceeding minute branches, interwoven with each other, and with cellular ſubſtance. Theſe veſſels re-

ceive

ceive blood from and return it back to the child.

The cake, therefore, consists of two parts, which, though intimately connected with each other, have a distinct system of blood-vessels; for the one belongs exclusively to the mother, and the other to the child; and no blood has ever been proved to pass *directly* from the one to the other.

The child is connected to the cake by a cord called the *Umbilical Cord*, or *Navel-String*, which consists of two arteries, a vein, and a quantity of a jelly-like substance, covered by skin, the external part of which seems to be formed by the two internal layers of the bag containing the child.

The Umbilical Cord varies in length and thickness in different cases. One of its extremities is attached to the cake, the other to the child. The former of these is fixed to no particular part of the after-birth in every case, for it is sometimes connected to the middle, sometimes to the edge, but more frequently to some part between them. The latter is generally, except in cases

cases of monsters, inserted into the middle of the belly of the child.

It was formerly observed *, that each branch into which the *Great Artery* is divided at the lower bone of the spine, is subdivided into two; the internal of these in the child before birth, being extended, run up along each side of the urinary bladder, and pass out at the centre of the belly. They form the *Arteries* of the umbilical cord. These arteries are divided into a very great number of minute branches, and terminate, as usual †, in veins, which uniting, form one large vessel, the vein in the umbilical cord.

This vein returns the blood to the child, and conveys it in the most expeditious manner to the heart by peculiar canals, which are shut up soon after birth.

In grown people, it was formerly remarked ‡, all the blood returned from every part of the body is distributed over the substance of the lungs, before it is again

* Introduction, p. 74.

† See Introduction, p. 6.

‡ Introduction, p. 55.

circulated

circulated through the ſyſtem. This takes place in children immediately after birth: before that time, however, a ſmall portion of the blood only is ſent to the lungs, but the whole is diſtributed over the cake.

From this circumſtance, and from the child being very ſoon killed when the cord is ſo much compreſſed that the blood cannot paſs through it, the cake, it is probable, ſerves the ſame purpoſe to the child before birth which the lungs do afterwards.

THE *Water* contained within the layers which ſurround the child is ſomewhat heavier than common water. It has a ſaltiſh taſte, does not coagulate, like the white of an egg, but ſeems to approach in its properties to the nature of urine. This fluid is ſeldom, except in the early months of pregnancy, quite pure, for it is liable to become polluted by impurities from the child.

This water, therefore, cannot, from its nature, be intended for the nouriſhment of the infant; a fact which is confirmed by the circumſtance of its being in much greater quantity in proportion to the ſize

of the child, in the early than in the latter months.

This fluid ſerves ſeveral valuable purpoſes. It defends the child from external injuries; it affords it an equable temperature, which is not liable to the extremes of heat and cold, to which the body of the woman muſt neceſſarily be ſubject; and it has other important uſes, which will be afterwards explained.

THE poſition of the child in the womb merits attention, as it explains the cauſes of ſome of the dangers to which women are ſometimes expoſed during parturition.

The ſubſtance by which the child is connected to the mother is not attached to any certain particular part of the womb; for it is ſometimes fixed to the neck or orifice, but fortunately more often to the bottom, or near it.

The child during the early months of pregnancy floats looſely in the fluid by which it is ſurrounded; but after it has increaſed to ſuch a ſize as to occupy nearly the whole cavity in which it is contained,

ed, it is folded into an oval figure, ſo that it takes up almoſt the leaſt poſſible ſpace.

The ſpine is therefore bended, the head reclined downwards, and ſupported by the hands, and the knees are drawn up towards the head.

One or other extremity of this oval figure which the child forms is commonly placed at the mouth of the womb, and in by far the greateſt number of caſes it is that made by the head; ſometimes, however, the other extremity is in that ſituation. It happens alſo in very rare caſes, that the extremities are placed towards the ſides of the womb; a circumſtance which muſt render *Delivery* difficult and hazardous.

THE contents of the womb increaſe in ſize at firſt very ſlowly, and afterwards rapidly; for after the firſt eight or nine weeks the bag which contains the child is ſeldom larger than a hen's egg; but from that time it becomes perceptibly enlarged every week or two.

As children at the full time differ in ſize and weight in different caſes, it is probable

that the ſame degrees of difference take place in the early months: therefore no particular proportions can be aſcertained reſpecting the dimenſions of children at the various periods of pregnancy.

A child born at the full time generally weighs from ſix to ten pounds, which latter it ſeldom exceeds; and every child which does not weigh more than five pounds, may be conſidered to be premature.

When more than one child is contained within the womb, each is included in its own proper membranes, and is attached to the mother by a cake peculiar to itſelf. In many caſes, however, the cakes are contiguous to, or entirely blended with each other: but the navel-ſtring, which belongs to each child, points out the diſtinction between them, and proves that a ſingle cake cannot ſerve two or more children. In ſome rare caſes, the blood-veſſels belonging to the child of each cake communicate with each other: hence a particular precaution in the management of the delivery of *Twins* becomes neceſſary.

SEC-

SECTION III.

SIGNS *of* PREGNANCY.

THE womb has a very extenſive influence, by means of its nerves, on many other parts of the body; hence the changes which are produced on it by impregnation muſt be productive of changes on the ſtate of the general ſyſtem. Theſe conſtitute the *Signs* of Pregnancy.

The Signs of Pregnancy may be divided into thoſe of the early, and thoſe of the later months.

DURING the firſt fourteen or fifteen weeks, the Signs of Pregnancy are very ambiguous, and cannot be depended on; for as they proceed from the irritation of the womb, on other parts, they may be occaſioned by every circumſtance which can alter the natural ſtate of that organ.

The firſt circumſtance which renders pregnancy probable, is the ſuppreſſion of the periodical evacuation, which is generally

rally accompanied with fullneſs in the breaſts, headach, fluſhings in the face, and heat in the palms.

Theſe ſymptoms are commonly the conſequences of ſuppreſſion, and therefore are to be regarded as ſigns of pregnancy in ſo far only as they depend on it.

As, however, ſuppreſſion of the periodical evacuation often happens from accidental expoſure to cold, or from the change of life in conſequence of marriage, it can never be conſidered as an infallible ſign.

THE belly, ſome weeks after pregnancy, becomes flat, from the womb ſinking, as formerly explained *; and hence drawing down the inteſtines along with it. But this cannot be looked upon as a certain ſign of pregnancy, becauſe an enlargement of the womb from any other cauſe will produce the ſame effect.

MANY women, ſoon after they are pregnant, become very much altered in their looks, and have peculiar irritable feelings,

* P. 153.

inducing

inducing a difpofition of mind which renders their temper eafily ruffled, and incites an irrififtible propenfity to actions of which on other occafions they would be afhamed.

In fuch cafes the features acquire a peculiar fharpnefs, the eyes appear larger, and the mouth wider than ufual, and the woman has a particular appearance, which cannot be defcribed, but with which women are well acquainted.

Thefe *Breeding* fymptoms, as they are called, originate from the irritation produced on the womb by impregnation; and as they may proceed from any other circumftance which can irritate that organ, they cannot be depended on when the woman is not young, or where there is not a continued fuppreffion for at leaft three periods.

The irritations on the parts contiguous to the womb are equally ambiguous, and therefore the figns of pregnancy in the firft four months are always to be confidered as doubtful, unlefs every one enumerated be diftinctly and unequivocally prefent.

The

The following caſe will illuſtrate this obſervation.

CASE IV.

I was called many years ago to viſit a young lady who had been three months married, and who had miſſed the accuſtomed appearance for two periods.

About the time of the third period, however, ſhe had a ſlight ſhew, which was the occaſion of my being ſent for.

This lady had all the common ſigns of breeding which appear in the early months; for ſhe had had ſuppreſſion for two periods, attended with headach, fluſhing of the face, and heat in the palms of the hands; ſhe had enlarged breaſts, and that peculiar appearance in the countenance which I have already deſcribed, and ſhe imagined ſhe could account for the ſhew from an accidental circumſtance.

As, however, the diſcharge appeared to me, by the marks formerly mentioned *, not to be of the ſame nature with the peri-

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* P. 132.

odical

cal evacuation, I was not deceived, but at once mentioned to the friends of the family, that the lady was not pregnant, and that the ſymptoms which had made her imagine herſelf with child proceeded entirely from the change in her mode of life. I added, however, that by adopting the ſame precautions as if ſhe were really pregnant, there might be a probability that within a few weeks or months that circumſtance would take place; and the event of the caſe completely juſtified my opinion.

FROM the fourth month, the ſigns of pregnancy are leſs ambiguous, eſpecially after the womb has aſcended into the cavity of the belly.

In general about the fourth month, or a ſhort time after, the child becomes ſo much enlarged, that its motions begin to be felt by the mother; and hence a ſign is furniſhed at that period, called *Quickening*. Women very improperly conſider this ſign as the moſt unequivocal proof of pregnancy; for, though when it occurs about the

period deſcribed, preceded by the ſymptoms formerly enumerated, it may be looked upon as a ſure indication that the woman is with child; yet when there is an irregularity, either in the preceding ſymptoms or in its appearance, the ſituation of the woman muſt be doubtful.

This fact will be eaſily underſtood; for as the ſenſation of the motion of the child cannot be explained, or accurately deſcribed, women may readily miſtake other ſenſations for that of quickening. I have often known wind pent up in the bowels, and the natural pulſation of the great arteries, of which people are conſcious only in certain ſtates of the body, frequently miſtaken for this feeling.

After the fourth month, the womb riſes gradually from the cavity of the baſon, enlarges the belly, and puſhes out the navel; hence the *Protruſion* of the *Navel* has been conſidered one of the moſt certain ſigns of pregnancy in the latter months. Every circumſtance, however, which increaſes the bulk of the belly, occaſions this ſymptom;

tom; and therefore it cannot be trufted to unlefs other figns concur.

THE progreffive increafe of the belly, along with fuppreffion, (after having been formerly regular), and the confequent fymptoms, together with the fenfation of quickening at the proper period, afford the only true marks of pregnancy.

Thefe figns, however, are not to be entirely depended on; for the natural defire which every woman has to be a mother, will induce her to conceal, even from herfelf, every fymptom which may render her fituation doubtful, and to magnify every circumftance which can tend to prove that fhe is pregnant. A cafe which occurred to me lately, is the beft proof which I can offer on this fubject.

CASE V.

In the year —— I was engaged to attend a lady, formerly my patient, who thought herfelf at that time five months pregnant. A few days after, however, fhe had a flight *appearance*, which made me in-

quire very particularly into the circumſtances which induced her to think herſelf with child. I received the moſt ſatisfactory anſwers to all my queſtions; for ſhe deſcribed accurately every ſymptom of pregnancy in its natural order. The ſigns in the early months were, ſhe ſaid, followed by quickening, and an evident increaſe of bulk in the belly.

The nature of the *appearance*, I confeſs, led me to conſider the caſe doubtful, and therefore I requeſted that this lady ſhould aſcertain, by means of a piece of tape, the progreſſive increaſe of the belly; and the reſult was ſuch as might have miſled any one who had not ſeen many ſuch caſes: and indeed it ſtaggered me very much, for the ſhew ſtill continued to appear periodically. At laſt, when this lady imagined herſelf ſeven months pregnant, I became ſatisfied that ſhe was completely miſtaken, and was not with child.

I cannot avoid making a few reflections on this caſe, which I hope will prove uſeful, by cautioning women againſt allowing their

their imaginations to ſuggeſt feelings and ſymptoms which never exiſted.

This lady had formerly had children. She was young and healthy: hence no circumſtance could lead me, when engaged to attend her, to doubt her ſuppoſed pregnancy; for no practitioner of honour would ever preſume to put any queſtion to a patient which might convey the moſt diſtant idea of indelicacy.

When, however, the *appearance* took place, and recurred after a regular interval, I thought it incumbent on me to inquire into thoſe circumſtances which made the lady believe herſelf pregnant, and I received ſuch anſwers as muſt have removed every doubt, had I not met formerly with many ſimilar caſes. One ſymptom appeared ſo unequivocal that I was almoſt convinced; for I was told, the ſenſation of the motion of the child had for ſome time been ſo acute as to induce violent nervous affections.

But the recurrence of a ſhew, at the proper period, renewed my doubts in this caſe; and therefore I took the liberty to explain my thoughts, and to requeſt that

that the progreſſive increaſe of the belly ſhould be aſcertained. When this was deſcribed with the greateſt accuracy, I ſhould have been very culpable or officious had I continued to expreſs any apprehenſions reſpecting the ſituation of this lady, though I hinted the propriety of her not publicly declaring herſelf with child.

The diſagreeable ſenſations which ſhe muſt neceſſarily have felt, when it was determined beyond a doubt that ſhe was not with child, could not be imputed to my having deceived her, but to her having impoſed on herſelf.

The ſituation of practitioners in ſuch caſes muſt be very embarraſſing and diſtreſſing. It ought, however, to be adopted as a general rule, that where any irregular ſymptoms give room for ſuſpicion, if ſtrong proofs are offered in ſupport of the alleged pregnancy, the woman ſhould for a certain period be treated as if pregnant, in order to avoid thoſe unfortunate conſequences which have too often occurred from an oppoſite line of conduct.

BESIDE

Beside quickening and increaſe of bulk of the belly, another ſymptom appears in the latter months, which, when preceded by the ordinary ſigns, renders pregnancy certain beyond a doubt. It is the preſence of *milk* in the *breaſts*. When, however, there is any irregularity in the preceding ſymptoms, this ſign is no longer to be conſidered of any conſequence.

As every woman muſt naturally wiſh to diſtinguiſh pregnancy from diſeaſe, the diſorders which reſemble it form the ſubject of the next ſection. It is, however, neceſſary to remark, that wherever any circumſtance occurs which affords the moſt diſtant reaſon to doubt the caſe, recourſe ought to be had to the advice of an experienced practitioner, and every ſymptom ſhould be unreſervedly deſcribed to him.

SEC-

SECTION IV.

CIRCUMSTANCES *which induce* SYMPTOMS *resembling those of* PREGNANCY.

EVERY woman would certainly wish to avoid the sneers to which those are generally exposed who improperly imagine themselves with child. It must be an important object, therefore, to exhibit a view of the circumstances which occasion symptoms resembling those of pregnancy.

These vary much in their nature; for some are occasioned by morbid effects on the uterine system, which are sometimes the consequence of pregnancy; some originate from diseases affecting the womb, and others occur merely from the natural change at the decline of life.

IT is now universally known, that after impregnation, the child, in its original minute state, passes from one or other of the

the *Ovaria*, along the correſponding Fallopian Tube, into the womb. Sometimes, however, the child remains in the ovarium or tube, or falls into the belly, and nevertheleſs is nouriſhed, and increaſes in ſize for a certain time. Theſe caſes are named *Extra-Uterine Conceptions*.

For the firſt four oi ſive months, in ſuch caſes, the ſymptoms of breeding appear regularly. After that time, however, the breaſts loſe their enlarged appearance, and become flaccid; the belly no longer increaſes in ſize, and a weighty and cold ſenſation is felt in one ſide.

The uſual term of pregnancy at laſt elapſes without any ſymptom of labour.

Caſes of extra-uterine conceptions have terminated variouſly. In ſome irritable conſtitutions, the inflammation which muſt unavoidably be produced on the neighbouring parts, from the unuſual preſence of a large body, is ſo violent as to occaſion death; but in other caſes, ſuppuration is brought on, which furniſhes an outlet for the confined conception; and in ſome rare inſtances, the extra-uterine child has re-

mained, without exciting very disagreeable complaints, for many years.

The advice of a skilful practitioner, in every case of this kind, should be had recourse to, as it will be the means of preventing many of those dangerous symptoms which often are the consequence of inattention.

EVERY disease which, affecting the womb, tends to increase the size of that organ, or any of its appendages, produces symptoms which, for the first three or four months, nearly resemble those of pregnancy. Such are collections of blood, or hydatids, or tumours in the womb, and dropsy of the ovaria.

These may be distinguished from pregnancy by the symptoms peculiar to themselves, already described *, and are to be treated in the manner formerly advised.

ANOTHER circumstance, by increasing the size of the womb, may cause symp-

* Pages 108, 126, &c.

toms

toms like thoſe of *breeding*, the preſence of what is called *a Mole* in the womb.

Women were formerly much impoſed on by intereſted practitioners reſpecting the nature of moles. The moſt dreadful apprehenſions were excited in conſequence of theſe being alleged to be occaſioned by faults in the general habit, which it required the moſt vigorous employment of the powers of medicine to counteract.

Moles are however merely blighted conceptions, which, from retention in the womb, loſe their organized form.

They are generally expelled in the ſame manner as miſcarriages, and are preceded by the ſame ſymptoms, and hence require nearly a ſimilar treatment.

WOMEN who are married at a late period, anxious to have a family, naturally miſtake the circumſtances which appear at the decline of life for the ſigns of pregnancy. Such caſes are highly troubleſome to practitioners; for the patient, with great care, acquires the moſt accurate deſcription of the *breeding* ſymptoms, and

with wonderful facility imagines that ſhe feels every one of them.

The ſuppreſſion of the accuſtomed diſcharge firſt furniſhes hopes for what is anxiouſly wiſhed. Her ſuppoſed ſituation affords an excuſe for indulgence in inactive life, and for the gratification of every appetite: hence the natural diſpoſition to fulneſs, which ſtrong healthy women have at that time, is ſo much increaſed, that the belly becomes enlarged, while *idea* had formerly ſuggeſted the ſenſation of quickening.

In many ſuch caſes a fluid, reſembling milk, is found in the breaſts, which never fails to confirm the deluſions of the patient. It was formerly mentioned, that ſuch a fluid can be produced by mechanical preſſure on the breaſts *; perhaps ſome other circumſtances may alſo contribute to its formation, which have not yet been fully explained.

One very remarkable caſe of this kind, among many others which I have ſeen, occurred to me ſome years ago.

* Introduction, p. 20.

CASE

CASE VI.

A Lady, towards the decline of life, imagined ſhe had all the ſymptoms of pregnancy; but as ſhe had exceeded the uſual term according to her own reckoning, I was conſulted.

The deſcription ſhe gave of the appearance and regular ſucceſſion of the different breeding ſymptoms was ſo accurate, that had ſhe been a few years younger, I could not have heſitated to pronounce her with child.

When, however, I hinted ſome doubts founded on this circumſtance, ſhe ſaid ſhe would give a convincing proof, which would at once overturn my incredulity; and immediately made a fluid, reſembling milk, ſpring from her breaſt. This Lady, however, was not pregnant.

SEC-

SECTION V.

DISEASES *incident to the* EARLY MONTHS *of* PREGNANCY.

IN consequence of *Irritation*, from the change produced by Pregnancy on the womb, many disagreeable complaints occur in the early months, which, though not immediately dangerous, may, if neglected, occasion the loss of the child, and lay the foundation for a train of disorders, which may materially impair the health of the patient.

The principal diseases incident to the early months are, Sickness and Vomiting, Heartburn, Disordered State of the Bowels, Unnatural craving, Swelling and Pain of the Breasts, Fainting and Nervous Fits, and Preternatural Change of Position of the Womb.

Sickness and Vomiting.—The most healthy women are as much subject to *Sickness* and *Vomiting* during the early months of pregnancy

nancy as thofe who are weak or delicate. They require, however, very different treatment in thefe two cafes.

When ficknefs or vomiting is attended with violent ftrainings, bleeding at the nofe, pain or giddinefs in the head, flufhing in the face, increafed heat in the palms of the hands, with other fymptoms of fulnefs and difturbed reft, blood-letting, with an open belly, and a fpare diet, afford the greateft relief.

When, however, the vomiting occurs in weak delicate women, and when it is attended with great weaknefs and languor, with a difpofition to fweat on ufing moderate exercife, or during the night, a very oppofite plan of management muft be purfued.

In fuch cafes, bleeding fhould be carefully avoided, and a light nutritious diet ought to be recommended. The moderate ufe of wine will alfo be neceffary.

Small dofes of any light ftomachic bitter, as Columbo, Peruvian bark, or the bitters, the preparation of which is defcribed in the forms of medicine at the end of this work, fhould be taken every day during the

the early months by thoſe who are deli- cate.

The powers of digeſtion being impaired, the ſtomach becomes readily loaded with crude indigeſted food; and hence ſickneſs and vomiting are occaſioned. Women in the early months ſeem to have a natural tendency to this cauſe of ſickneſs, which may probably be owing both to the particular change in the ſyſtem, and to the inactive ſedentary life in which many think themſelves obliged to indulge at that time.

The ſtomach may be known to be diſordered, if, along with violent retchings, the tongue is foul, and there is an ill taſte in the mouth, attended with fetid breath or belchings.

When ſuch ſymptoms accompany the ſickneſs or vomiting, the ſtomach ſhould be emptied once or twice a-week, by means of fifteen or eighteen grains of Ipecacuan, which will affect the body much leſs than natural ſtraining in vomiting, and will often produce the happieſt effects.

In many caſes, however, the breeding ſickneſs continues, notwithſtanding every remedy, till the womb riſes into the cavity

of

of the belly, and the motion of the child be diſtinctly perceived, when in general it diſappears.

When the ſickneſs is exceſſive, although the ſtomach is not diſordered, opiates often afford temporary relief.

The plaſter with opium, deſcribed in the forms of medicine, applied to the pit of the ſtomach, has often moderated the ſickneſs, when every other means had been tried in vain. Many practitioners recommend plaſters compoſed of various ſtimulating and heating materials, to be applied in the ſame manner; but as they are frequently productive of very diſagreeable complaints, in conſequence of the violent irritation which they induce, if they ought not to be entirely exploded, at leaſt they ſhould be employed with much caution, and only by the advice of an experienced practitioner.

Heartburn. — The uneaſy ſenſation produced by Heartburn, though commonly confined to the early months, ſometimes accompanies every ſtage of pregnancy.

This complaint often originates from leſs degrees of thoſe cauſes which occaſion

ſickneſs and vomiting; hence, in different caſes, it will require a variety of treatment.

When the Heartburn is attended with a conſtant deſire to hawk up phlegm, the ſtomach ſhould be emptied by a vomit, the ſtate of the belly attended to, and ſmall doſes of the peruvian bark and vitriolic acid ought to be taken once or twice a-day.

If this complaint be accompanied with a ſour taſte in the mouth and acid eructations, Lime water, prepared Chalk, mixed with water, or Magneſia, afford the beſt palliatives. The belly ſhould be kept gently open by means of magneſia and rhubarb. Groſs food of every kind ought to be avoided, and the ſtomach ſhould never be overloaded.

When, however, the uneaſy burning pain produced by this diſeaſe is not attended with an inclination to hawk up phlegm nor acid eructations, a little fine Gum Arabic, or a ſpoonful of a fluid prepared by mixing the white of an egg with a little ſugar and water, ſo as to make it of the conſiſtence of thin ſyrup, taken occaſionally,

ſionally, will in many caſes moderate the pain. If the patient, with ſuch ſymptoms, has any marks of fulneſs, ſhe ſhould loſe blood.

Diſordered State of the Bowels.—The natural functions of the ſtomach are very liable to become diſordered in the early months of pregnancy; hence *Looſeneſs* of the belly is a common complaint at that time.

This diſorder proceeds from various cauſes; and therefore it requires, in different caſes, different modes of treatment.

When looſeneſs of the belly is attended with ſymptoms of diſordered ſtomach, it can only be remedied by a vomit and gentle doſes of magneſia and rhubarb, while at the ſame time every irregularity in diet muſt be carefully avoided. When there is no ſickneſs, two or three doſes of magneſia and rhubarb will be ſufficient.

In theſe caſes the uſe of opiates, or any reſtringent medicine, with a view to remove the complaint, will prove highly injurious; for they would tend to increaſe the diſordered ſtate of the ſtomach and bowels.

If, however, loofenefs of the belly proceeds from the irritation produced by the increafing bulk of the womb on the ftraight gut, to which it has been obferved * it is contiguous, fmall dofes of opiates will then be beneficial. This caufe may be fufpected if the loofenefs is not accompanied with any fymptoms of diforderd ftomach. In this cafe, when the ftraining at ftool is violent or very frequent, occafional *Lavemens* made of thin ftarch, with fifty or fixty drops of Laudanum, may be had recourfe to with great fafety.

Unnatural Cravings. — Pregnant women have often unnatural cravings, or what are termed *Longings*, which, however abfurd they may appear on fome occafions, are frequently entirely *involuntary*. Where they are confined to articles relating to Diet this may always be confidered to be the cafe.

Thefe cravings feem to proceed from the ftate of the ftomach, for they often occur in men whofe ftomachs are difordered.

* Page 95.

The

The peculiarly irritable ſtate of the mind during pregnancy, already taken notice of, probably increaſes the violence of cravings, which might, under other circumſtances, be only felt as tranſient deſires.

Longings ſhould, unleſs where the indulgence might be followed by diſagreeable conſequences, be in general ſatisfied; for when the appetite is feeble, and the powers of digeſtion impaired, the ſtomach often rejects particular ſubſtances, and retains others, which, though ſeemingly whimſical, are ſuggeſted by a kind of natural craving.

Although, therefore, unlimited compliance with every deſire might be improper, yet the wiſhed-for ſubſtance, where it can be eaſily procured, ſhould be allowed, as it may perhaps agree better with the ſtomach than any other ſubſtance, and as diſappointment in the irritable ſtate of early pregnancy might induce paſſions of the mind which would be productive of many diſagreeable circumſtances.

Women often claim indulgence in their longings, by an argument which is well calculated to inſure ſucceſs, the dangers which

which might happen to the child from their cravings being neglected.

Although at present the idea, of the imagination of the mother having the power to produce *marks* on the body of the child, does not ſo univerſally prevail as it did formerly; yet many people, judicious and well informed in other reſpects, ſtill ſeem to favour this opinion.

Many caſes might be adduced, where children were born with marks on the ſkin, (vulgarly called *fleſh-marks*) where the mother had never been conſcious of any longings; and many inſtances might alſo be cited, where women have been refuſed the indulgence of their longings, without any effect having been produced on the child, although the woman's imagination had continued to dwell on the ſubject for ſeveral months.

Women do not poſſeſs the power of altering the ſtructure of any part of their own body, with which however they can have an immediate relation. It cannot therefore be thought probable, that Nature has made them capable of altering, by any paſſion of the mind, the ſtructure of a body, to which,

which, it has been remarked *, their fluids are not even, directly tranſmitted.

Fleſh-marks originate from accidental injuries of the ſkin when the child remains in the womb, which may be occaſioned by its particular ſituation, and a variety of other circumſtances.

Paſſions of the mind which induce violent agitations of the body, during the early months, when the child is very delicate and tender, may not only cauſe fleſh-marks, but alſo ſuch a derangement of its organs as to render it *monſtruous*; hence longings under ſuch circumſtances only can affect the child.

Swelling and *Pain* in the *Breaſts*.—From the remarkable connection between the womb and the breaſts, already taken notice of †, theſe in the early months of pregnancy often become ſwelled, and hence occaſion pain. Theſe ſymptoms are moſt diſtreſſing to women who are in great good health, and of a full habit of body.

In general theſe complaints require only

* Page 159. † Page 87.

that

that the breaſts be kept quite looſe, and covered with ſoft flannel or fur. Stays, therefore, if they are worn, ſhould be carefully prevented from preſſing on theſe parts.

When the ſwelling and pain render the woman very uneaſy, a little fine warm olive-oil ſhould be rubbed gently on the breaſts evening and morning, and afterwards the flannel muſt be applied. The belly ſhould be kept open, and if there be marks of general fulneſs, blood ought to be drawn from the arm.

Hyſteric and *Fainting Fits.* — Many women are ſubject to theſe complaints during the early months, and eſpecially about the period of quickening. They are merely temporary ſymptoms; and though in ſome caſes they are attended with alarming appearances, in general, they are ſlight, and of ſhort duration.

The treatment of theſe complaints muſt be varied according to the ſtate of the patient's body. If the woman have, along with the faintings, &c. any ſymptoms of fulneſs, blood-letting, ſpare diet, and an open belly afford the beſt means of relief. But

But, as is moſt frequently the caſe, if the woman be of a weak irritable habit, eaſily affected by ſurpriſe, or ſubject to paſſions of the mind from external accidents in the unimpregnated ſtate, nervous and fainting fits will be the natural conſequence of that peculiarly irritable diſpoſition during the early months of pregnancy, which has already been deſcribed *.

In ſuch caſes, opiates can alone perhaps be depended on to remove the immediate complaints; and variation of ſcene, chearful company, moderate eaſy exerciſe in the open air, together with the uſe of any light bitter, will probably prevent their recurrence, or moderate their violence.

Officious attendants often recommend *Cordial* drinks in theſe caſes. But all liquors of that nature ſhould be prohibited, unleſs on the moſt urgent occaſions; and when they are allowed, they ſhould be confined to Claret or Port wine and water.

The temporary relief from nervous complaints which ſtrong heating liquors afford, readily render their frequent uſe habitual,

* P. 167.

and lay the foundation for a practice which, in the female ſex, is in a particular manner diſguſting and dangerous; and therefore, in general, ſuch indulgences ſhould be ſteadily refuſed.

Preternatural Change of *Poſition* of the *Womb*—The poſition of the womb is apt to become preternaturally changed a little before it riſes out of the cavity of the baſon, which happens ſome time about the fourth month, as formerly mentioned *. As this circumſtance conſtitutes a diſeaſe †, which, if not early attended to, is productive of very great danger, a knowledge of its ſymptoms and cauſes muſt be an intereſting and important object to every woman.

The firſt ſymptoms of the diſeaſe are, ſuppreſſion of urine, with a ſenſe of uneaſy weight, occaſioning pain and bearing down, at the back part of the baſon, attended with frequent unneceſſary calls to ſtool. By degrees the pain becomes ſo violent, as to induce ſtrainings like thoſe which occur during labour.

* P. 153.

† It is called, in medical language, the *Retroverted Womb.*

The

The pain of the diſtended bladder, after a ſhort time, becomes intolerable; the poſterior part of the vagina is protruded in form of a tumour; and the calls to ſtool are very urgent, but are only productive of fatiguing fruitleſs efforts.

At laſt the bladder is violently inflamed; hence fever, delirium, and convulſions, terminate the ſufferings of the unfortunate patient.

All theſe complaints are occaſioned by the womb being turned out of its natural ſituation; for in theſe caſes its bottom is puſhed back between the upper part of the vagina and the ſtraight gut, and its mouth is drawn upwards to the ſuperior edge of the ſhare-bones: hence the uneaſy ſenſation in the back part of the baſon, the bearing down pain, with the protruſion of the vagina, are explained.

When the womb continues in this ſituation, the common diſcharges muſt be neceſſarily ſtopt; and conſequently, from the diſtenſion of the bladder, and the accumulation of the contents of the inteſtines, obſtacles are occaſioned which oppoſe the return of the womb to its proper ſituation.'

This particular complaint can be diſtinguiſhed from every other by the ſymptoms already enumerated, and by a bulky body being readily felt between the vagina and ſtraight gut, which occupies the whole cavity of the baſon.

Violent exerciſe, or bearing down from exertions in conſequence of laughing, crying, ſtraining from retching, &c. when the bladder is full, at that time when the womb begins to riſe out of the cavity of the baſon, are probably the Cauſes of the preternatural change of poſition of that organ.

The event of this diſeaſe, unleſs proper advice has been early had recourſe to, is always uncertain. When the urine and contents of the inteſtines have been retained for a conſiderable time, along with bearing down pain and protruſion of the vagina, the woman's life is in very great danger.

The cure in theſe caſes depends on the womb being replaced in its natural ſituation, and being kept there till its increaſed bulk prevents the poſſibility of its again ſinking down.

This

This cannot be accomplifhed unlefs the urine and contents of the inteftines are previoufly removed; and then, if the difeafe has not continued for feveral days, the reduction can be eafily effected by gentle means.

It requires often the moft dexterous management to draw off the water in fuch cafes, from the altered pofition of the paffage to the bladder; and therefore, as the life of the woman muft depend much on that operation, the moft experienced and fkilful practioner ought always to be called in.

Blood-letting and opiates will in fome cafes be neceffary.

The recurrence of the complaint can only be prevented by confinement to the horizontal pofture, till the increafed bulk of the womb makes it rife above the brim of the bafon.

Women who, from particular circumftances, do not obey the calls of nature when they occur, are fubject, about the fifteenth or fixteenth week of pregnancy, to a flight degree of this difeafe; for the bladder being connected with the forepart of

of the womb, when much diſtended, will readily puſh that organ backwards, as it will more eaſily yield to afford room for the increaſed bulk of the bladder than the coverings of the forepart of the belly.

Although, in ſuch caſes, a diſpoſition towards the preternatural change in the ſituation of the womb, already deſcribed, takes place; if the bladder be emptied by proper means, no diſagreeable conſequence will follow, provided the woman is kept quiet, and in the horizontal poſture.

Within theſe few years, ſeveral eminent authors and practitioners, from having ſeen theſe caſes, have adopted an idea reſpecting the nature and cure of the Preternatural Change of Poſition of the Womb, which inculcates a very dangerous practice.

They have alleged, that as the poſition of the womb can only be preternaturally altered by ſuppreſſion of urine, if that can be removed, no danger will enſue; and that there is no neceſſity for attempting to reduce the diſplaced organ to its natural ſituation, becauſe the gradual increaſe of its bulk will readily accompliſh it.

Such

Such opinions, it is evident, are founded on thoſe caſes where there is only a trifling change of poſition in the womb, from the diſtenſion of the bladder, as already explained.

If ſuch practitioners were called to viſit a patient who, along with ſuppreſſion of urine, &c. had violent bearing-down pains, with protruſion of the vagina, and if on examination a large tumour were found between the vagina and ſtraight gut, were they to content themſelves with drawing off the water, and endeavouring to procure a diſcharge of the contents of the inteſtines, their unhappy patient would be probably ſoon loſt.

It would afford very poor conſolation to the friends of the unfortunate woman, to be told, that their advice was not early enough had recourſe to; for that at the preſent time no practitioner of credit conſiders this complaint a caſe of any difficulty, or feels any ſolicitude for the event, provided he be called to the relief of the patient *before* any *miſchief* be *actually done.*

Were minute inveſtigations conſiſtent with the deſign of this work, it could be eaſily

easily proved, from the writings of such practitioners, that they have not drawn a proper distinction between the *tendency* to and real *existence* of this disease; for they have not even hinted at the symptoms which I have described to be characteristic marks of the complaint.

SECTION VI.

DISEASES *incident to* WOMEN *during the* LATTER MONTHS *of* PREGNANCY.

FROM the situation of the womb during the latter months of pregnancy, it cannot appear surprising that women are subject to many complaints at that period. The ordinary disorders which occur in advanced pregnancy are, Costiveness, Piles, Swellings in the Legs, Thighs, and lower Part of the Belly, Pains in the Back and Loins, Cough and Breathlessness, Cramps, Colic Pains, and Suppression, Difficulty, or Incontinence of Urine.

Costiveness.

Costiveness. — Many women disregard this complaint, as it appears trifling, and in their opinion cannot be productive of much danger. The most unfortunate consequences, however, have often been occasioned by neglected costiveness.

The pressure of the womb on the contents of the belly must have a considerable effect in producing this disease; but that, perhaps, is not the only cause; for it is probable, that during the latter months of pregnancy, a larger proportion of blood than usual is prepared from the same quantity of food, and therefore the contents of the intestines will be more coarse and solid.

Women should never allow more than one day to pass without having a motion: they may keep themselves regular in this respect by the use of a considerable proportion of vegetables in their diet, and they may take occasionally a dose of any of the laxatives mentioned in the forms of medicine.

When women have unfortunately been constipated for several days, they ought at once to apply to an experienced practitioner,

tioner, as they might otherwiſe be expoſed to much hazard. If, in that ſituation, they ſhould take any ordinary laxative medicine, they would increaſe the danger of the diſeaſe; for the coarſe hard ſolid contents of the inteſtines would be expelled with great pain and much difficulty, or might be retained while the inteſtines would be violently irritated.

In theſe caſes, therefore, repeated emollient *Lavemens* ſhould be adminiſtered previous to the uſe of any laxative medicine.

Piles.—Small livid tumours, at the bottom of the ſtraight gut, occaſioning conſiderable pain, are called *Piles:* they are the common attendants of coſtiveneſs, though it is probable that ſome other circumſtances contribute to induce this diſeaſe during the latter months of pregnancy.

The piles, when attended with no diſcharge, are named *blind;* and *bleeding*, when blood is poured out from them. They are divided into external and internal, from their particular ſituation; for when the livid tumours are ſituated about the

the verge of the anus, they obtain the former name, and the latter when they do not appear externally.

The external piles can be very readily diftinguifhed; but it requires confiderable judgement to difcover the exiftence of internal ones. When, however, violent pain is felt at the lower part of the ftraight gut on going to ftool, or on walking, and at no other time, there can be little doubt of the nature of the difeafe.

The blind piles are always moft painful; the bleeding ones never prove troublefome, unlefs they are attended with fuch a difcharge as to weaken the body.

Piles, during pregnancy, cannot be completely cured. The painful fymptoms, however, can be moderated. For this purpofe, fpare living, occafional blood-letting, and keeping an open belly, are chiefly to be depended on.

When the fwelling from piles is confiderable, the application of any aftringent fubftance, fuch as an ointment prepared of two parts of Goulard's cerate, and one of powdered galls, will be found ufeful.

If, along with great ſwelling, there is a violent throbbing pain, attended with feveriſh ſymptoms, &c. leeches ſhould be applied to the part, and afterwards fomentations to encourage the bleeding. Sitting over the ſteams of warm water has been recommended in ſuch caſes; but it may be productive of very bad effects, and ſhould not therefore be adviſed.

The bleeding piles require no particular management, except attention to the ſtate of the belly, unleſs the diſcharge from them be profuſe, which it ſeldom is during pregnancy. At that period it may generally, perhaps, be conſidered as a critical evacuation.

The old remedy of ſulphur, when joined to an equal proportion of cream of tartar, I have found very uſeful in every caſe of piles. The good effects of this medicine are not to be attributed to any ſpecific quality, but merely to its acting as a gentle laxative.

The principal inconvenience ariſing from this complaint is, that the patient cannot take that exerciſe which her ſituation would otherwiſe require; for the piles are

always

always much relieved by reſt in the horizontal poſture.

Swellings in the Legs, Thighs, and lower part of the Belly.—In the latter months of pregnancy theſe parts are liable to Swellings, which at firſt ſubſide in the morning, and occur only towards night, but which at laſt continue conſtantly with little variation.

Theſe ſwellings, when the general health is not impaired, are attended with no danger, and are only troubleſome when they occur in a violent degree, which they ſeldom do except in firſt pregnancies, or where the increaſe of bulk of the womb is very conſiderable.

Theſe complaints diſappear ſoon after delivery, and are therefore to be conſidered as temporary evils only.

Where there are no ſymptoms of great fulneſs, the treatment of ſwellings of the legs, thighs, &c. during the latter months of pregnancy, muſt conſiſt of attempts to palliate the diſtreſſing ſymptoms, which may be accompliſhed by moderate eaſy exerciſe, rubbing the ſwelled parts gently

evening

evening and morning with a flesh-brush or with soft flannel, keeping the belly open, and using frequently the horizontal posture.

When, however, along with the swellings, there are evident signs of general fulness of the body, blood-letting, and a spare diet, will alone prevent the dangerous effects which might be the consequence of such a state after delivery.

Pains in the Back, Belly and Loins, are very common complaints in the last months of pregnancy.

They proceed from a variety of causes, as the change of situation of the womb, its pressure on the neighbouring parts, &c. and hence they require a variety of treatment suited to the circumstances of the case.

When these pains are slight, change of posture, and attention to diet and to the state of the belly, are alone requisite; but where they are very violent, recourse ought to be had to the advice of a skilful practitioner, as small bleedings, opiates, &c. will be often necessary.

Cough and *Breathleſsneſs.*—It was formerly remarked *, that the belly is divided from the cheſt by a fleſhy partition, which is capable of increaſing or diminiſhing the cavity of either. When the womb riſes very high, it preſſes on this partition, and hence a proper ſpace is not allowed for the free expanſion of the lungs. From this circumſtance breathleſſneſs is occaſioned; and as the blood in ſuch caſes cannot paſs freely through the lungs, an irritation will be produced, which excites the cough.

Theſe complaints cannot be removed till the ſize of the womb is diminiſhed, and therefore no permanent relief is to be expected till after delivery.

When, however, they prove very troubleſome, occaſional blood-letting, an open belly, and a proper poſture when in bed, (viz. half ſitting and half lying), will afford the beſt means of relief.

Bliſters, as ſome have recommended, can only be productive of temporary good effects; and as they muſt be always attended with conſiderable pain, and may be the

* Page 49.

ſource of many diſagreeable ſenſations, they ought ſeldom to be employed.

Cramps.—Women near the end of pregnancy are ſubject to Cramps in the Legs, Thighs, &c. which occur moſt frequently when lying in bed. They are occaſioned by the preſſure of the womb; and therefore, like the complaints depending on the ſame cauſe, they do not entirely diſappear till after delivery.

When the diſagreeable ſenſation ariſing from Cramps is very painful, rubbing with dry flannel or a fleſh-bruſh, or the application of Anodyne or Opodeldoc balſam, or Æther, to the affected parts, will be the beſt mode of procuring relief. Opiates, where the belly is looſe, may alſo be had recourſe to occaſionally.

Cholic Pains.—Towards the latter end of pregnancy, cholic pains are often ſo ſevere as to threaten to induce, or even to reſemble throes of labour. They proceed from ſeveral cauſes, ſuch as, diſordered bowels, preſſure of the womb, irregularities in the diet, &c. If cholic pains are not

not preceded by, nor attended with coſtiveneſs, they may be eaſily remedied by opiates, and a proper regulation of diet.

But if along with theſe pains, the woman is coſtive, or has lately been ſo, then the greateſt danger is to be apprehended, unleſs the coſtiveneſs be removed. In theſe caſes, the moſt experienced practitioner ſhould be at once conſulted, otherwiſe by improper treatment, or from the circumſtances of the complaint not being accurately diſcovered, the moſt unfortunate event may enſue; for ſometimes in ſuch caſes, there is an appearance of the complaint quite oppoſite to coſtiveneſs, which originates merely from the drinks which are taken being tinged with the contents of the inteſtines in their paſſage through theſe organs.

This appearance of looſeneſs, when in fact obſtinate coſtiveneſs exiſts, has often deceived the attendants, as well as the patients, and ought therefore to be carefully diſtinguiſhed. Within theſe few years, I had occaſion to ſee a melancholy proof of this kind, which I ſhall relate, in order that it may ſerve to point out the very

great neceſſity of inquiring particularly into every circumſtance in all ſuch caſes.

CASE VII.

I was called ſome years ago to viſit a lady who had been two days in labour. I underſtood that during the whole period of pregnancy, ſhe had been ſubject to obſtinate coſtiveneſs; but that, for the ten days immediately preceding labour, ſhe had had conſtant gripes, and frequent calls to ſtool, with the appearance of looſeneſs.

She was delivered with conſiderable difficulty, but the cholic pains continued ſo violent, as to occaſion more real pain than the throes of labour had done.

I had no doubt reſpecting the nature of the caſe, and therefore ordered every means to be employed which are calculated to remove obſtinate coſtiveneſs.

Theſe, however, had no effect; the pains ſtill continued violent, along with bilious vomitings; the belly became very much ſwelled, and the diſtreſs of the patient was beyond deſcription. At laſt, ſhe felt ſudden relief, and thought herſelf free from every

every complaint. This, however, was occaſioned by mortification of the bowels, in conſequence of inflammation. A weak feeble pulſe, cold extremities, and the involuntary diſcharge of putrid ſtools, announced the approaching fatal event, which took place in a ſhort time afterwards, on the third day after delivery.

Suppreſſion, *Difficulty*, or *Incontinence* of *Urine*.—Theſe complaints generally trouble women near the term of delivery. As they proceed from the preſſure of the womb, they cannot be expected to be removed, till the womb be emptied of its contents.

Suppreſſion of urine is always to be conſidered as a complaint which may be productive of the worſt conſequences, if neglected; for beſides laying the foundation for future diſorders, if labour ſhould come on during ſuppreſſion of urine, the bladder might be irreparably injured. Recourſe ſhould be had therefore in all ſuch caſes to the aſſiſtance of a ſkilful practitioner. Difficulty in making water may be often remo-

ved by change of poſture, which ſhould be carefully attended to.

Incontinence of urine is a moſt diſagreeable complaint, as it keeps the patient always in a moſt uncomfortable ſtate. It can only be moderated by frequent horizontal poſture; and its bad effects may be prevented by the moſt ſcrupulous attention to cleanlineſs, and the uſe of a thick compreſs of linen, or a proper ſponge.

SECTION VII.

CONVULSIONS *during* PREGNANCY.

WHEN convulſions occur during pregnancy, the life of the patient is always to be conſidered in the moſt imminent danger.

Theſe alarming and frightful fits ſometimes come on ſuddenly, but more frequently are preceded by violent pains in the head or ſtomach, and dimneſs or loſs of ſight, together with great oppreſſion about the breaſt.

Hyſteric

Hyſteric fits have in ſome caſes been miſtaken for convulſions; but they may always be diſtinguiſhed by this circumſtance, that in the latter there is a diſcharge of a frothy fluid from the mouth, which never appears in the former.

When ſuch dangerous complaints occur, the moſt eminent practitioner ſhould be immediately called in, as the patient's life muſt generally depend on proper treatment.

It would be inconſiſtent with the nature of this work to enumerate the various remedies neceſſary in convulſions; but by exhibiting the ordinary cauſes of that dreadful diſeaſe, ſuch cautions may be ſuggeſted as may perhaps ſave ſome women from dangers to which they might otherwiſe be expoſed.

Convulſions only occur in thoſe habits which are much exhauſted from profuſe evacuations, or which are ſupplied with a larger proportion of blood than uſual.

It is in the latter of theſe habits that convulſions during pregnancy occur moſt commonly.

It

It has already been obſerved, that a large quantity of blood is neceſſary in the pregnant ſtate, eſpecially in the latter months; but if women at that time ſhould indulge in a very full diet, it is probable that a greater proportion than what the nouriſhment of the child requires will be prepared.

In ſuch caſes, women are readily ſubject to convulſions, if expoſed to any ſudden violent agitation of the mind, as fright, anger, &c.

Where women are thus liable to the diſeaſe, irritations on any of the acutely ſenſible organs will occaſion it, ſuch as over diſtention of the bladder, or the long continued preſſure of the bulky womb on any particular delicate part. The following unfortunate caſe, to which I was called ſome years ago, affords a remarkable illuſtration of this obſervation.

CASE VIII.

A Lady who had formerly had children was ſuddenly ſeized with convulſions in the latter months of pregnancy, which were ſo violent

violent that the child was forced through the ſubſtance of the womb into the belly, and the unfortunate patient was dead before my arrival, though I was in the houſe a few minutes after the firſt attack.

On inquiring into the circumſtances of the caſe, I learned that this lady, naturally of a full habit, had been engaged for ſeveral days in an occupation which obliged her to incline the body to one ſide. Before the convulſions came on, ſhe complained of a very violent fixed pain in one ſide, that to which ſhe had inclined.

The treatment of convulſions during pregnancy muſt depend on a variety of circumſtances; and therefore ſuch caſes, as I have already remarked, ought always to be truſted to an experienced practitioner.

Where proper aſſiſtance cannot be immediately procured, blood-letting, (unleſs the patient is very much exhauſted from previous weakening complaints), and expoſure to a free circulation of air, are the beſt means for affording temporary relief, and ſhould

ſhould not be neglected, as by retarding the progreſs of the diſeaſe the patient's life may be ſaved. The contents of the bowels alſo ſhould be cleared out by proper *Lavemens.*

SECTION VIII.

DISCHARGE *of* BLOOD *from the* WOMB *during* PREGNANCY.

REaſons have been already adduced *, to prove, that in the natural ſtate of pregnancy no diſcharge of blood can take place; hence the idea that women are ſometimes *regular* during the early months is erroneous. Every appearance of blood, therefore, in the pregnant ſtate, ought to be conſidered as a certain indication that ſomething uncommon has happened.

The diſcharge may either proceed from the paſſage to the womb, or from that organ itſelf. In the former caſe no bad ef-

* Page 153.

fects

fects can be dreaded, but in the latter one the moſt diſagreeable conſequences may enſue.

When a little blood comes away after walking or ſtanding for a conſiderable time, attended with a trifling pain at the lower part of the belly, without any ſymptoms of fever or of increaſed action of the blood-veſſels, and without any accident having occaſioned violent agitation of the body, it may be ſuppoſed to proceed from the paſſage to the womb, and may eaſily be remedied by confinement for a ſhort time to the horizontal poſture, and afterwards avoiding much walking or long continued erect poſition of the body.

When, however, the appearance of blood is preceded by or accompanied with fluſhings of the face and heat in the palms of the hands, with much thirſt; or when pains of the back, loins, or lower part of the belly, occur at the ſame time, then it may be conſidered to proceed from the womb itſelf.

In the early months of pregnancy, in ſuch caſes, the patient's life can never be in the ſmalleſt danger, if ſhe is not other-

 wiſe

wiſe unhealthy, provided ſhe be under the care of a ſkilful practitioner, though it is more than probable that the child will be deſtroyed, and miſcarriage induced.

But in the latter months, on the contrary, the life of the patient is always in great danger, unleſs the diſcharge be ſpeedily ſtopt.

The immediate cauſe of a diſcharge of blood from the womb during pregnancy, is the rupture of blood-veſſels, by the partial or total ſeparation of thoſe parts of the child which connect it with the mother.

This circumſtance explains the difference of danger in the early and latter months; for in the former, it has been remarked *, the blood-veſſels of the womb are ſmall, and therefore incapable of pouring out much blood; but in the latter they are very large, and hence may diſcharge in a ſhort time a great quantity †.

Every circumſtance which can increaſe the circulation of the blood in the early months, and all times of pregnancy, e-

* Page 153. † Page 156.

very

very accident which can injure the womb, will readily affect the connection between the mother and child; ſuch are violent agitation of the body, blows on the belly or back, or irritation from any of the neighbouring parts communicated to the womb.

There is another cauſe of this accident quite different from any other, and attended with much more danger. It depends on the improper place of attachment of the after-birth. The cake, it was obſerved *, is fixed to no particular part of the womb; in every caſe, where, therefore, it is attached to the neck of that organ, which it was alſo remarked happens ſeldom †, it muſt neceſſarily be ſeparated when that part begins to be changed in conſequence of pregnancy.

When a diſcharge of blood is once induced, it is liable to recur from the moſt trifling accidents, as ſurpriſe, exertions in coughing, laughing, &c.

The management in theſe caſes muſt be varied according to a number of circumſtances; for very oppoſite treatment is neceſſary in different caſes.

* Page 162. † Ibid.

Tranquillity of mind and reſt of body will be proper in every caſe. Confinement to bed, therefore, and ſeclusion from company, ſhould always be adviſed.

It is alſo of great importance that the patient be kept cool, for which purpoſe an airy bed-room ſhould be choſen, few bed-cloaths ought to be allowed, and the drinks, &c. muſt be almoſt quite cold.

In every caſe where blood is loſt, a degree of languor or faintiſhneſs is uſually induced, and hence officious attendants frequently exhibit ſpirits or wine as neceſſary cordials. As, however, theſe generally increaſe the action of the blood-veſſels, they ſerve to promote and increaſe the diſcharge, and ſhould therefore be ſtrictly prohibited.

The application of cold wet cloths to the lower part of the belly, is often employed in theſe caſes with the greateſt ſucceſs, eſpecially in the early months.

Blood-letting and opiates are remedies which on many occaſions produce the happieſt effects. But they may frequently be productive of much harm, and conſequently they are not admiſſible in every caſe.

The

The circumſtances on which the uſe of theſe remedies depends, cannot be explained with propriety in this work; and therefore the treatment of every caſe where the diſcharge is not ſtopped by the management already deſcribed, ought to be committed to the care of an experienced practitioner, otherwiſe the health of the patient may be materially impaired, or even her life endangered, beſides the loſs of the child.

This becomes more eſpecially neceſſary wherever the diſcharge is occaſioned by the particular place of attachment of the afterbirth; for in theſe caſes the danger is ſo great, that a few minutes delay may prove fatal to the patient. This cauſe can only be diſcovered by a ſkilful practitioner, and its dreadful effects can only be prevented by immediate delivery.

SECTION IX.

Abortion.

BY *Abortion* or *Miſcarriage*, is meant the expulſion of the child at any period when it cannot live; it muſt therefore happen during the firſt ſix months of pregnancy.

It has been a very prevalent opinion, that women in genteel life alone are ſubject to miſcarriage, except when it is occaſioned by any violent effect produced on the body by accidents. This, however, is a miſtake; for women in the lower ranks of life are as often liable to abortion as thoſe in the higher ſpheres, if they inhabit large cities. The regularity of living, and the other advantages enjoyed in the country, render that accident much leſs frequent there among women of every rank.

When the many irregularities in the mode of living, the impure air, &c. to which thoſe who inhabit cities of any extent

tent muſt neceſſarily be expoſed, are conſidered, it ,will appear extraordinary that miſcarriage does not happen much more often than it really does.

The ſymptoms of abortion are various. They do not appear in the ſame ſucceſſion in every caſe, and therefore they cannot be detailed with preciſion.

The ſudden ceſſation of the breeding ſymptoms, formerly detailed, * before the period of quickening, together with a ſenſe of weight and coldneſs in the lower part of the belly, or the ſame ſenſation at any time after quickening, with flaccidity of the breaſts, may be conſidered as ſure ſymptoms of future miſcarriage.

Pains in the back, loins, and lower part of the belly, bearing down, with regular intermiſſions and diſcharge of blood from the womb, are certain indications of threatening abortion.

The immediate Cauſe of abortion is the ſeparation of the appendages of the child from the womb, along with contraction of that organ. This may be induced by

* Page 167.

a

a variety of circumſtances with which it is of importance that every woman ſhould be acquainted.

The death of the child, which may happen from many cauſes, or a diſeaſed ſtate of any of its appendages, will inevitably occaſion abortion.

Some women have a certain *Tendency* to miſcarry, which renders the moſt trifling accident productive of that misfortune, while others ſuffer the moſt aſtoniſhing agitations of the mind and body, without the ſame bad conſequence.

Women have this tendency in different degrees, and are therefore liable to miſcarriage in the ſame proportion.

This tendency may depend on weakneſs, or irritability of the general habit, or of the womb itſelf, on a diſpoſition to fullneſs, or on ſome defect in the womb, which may prevent it from increaſing equally in ſize, according to the period of pregnancy. Women alſo who have formerly miſcarried, are very liable to frequent repetition of ſimilar accidents.

Wherever this tendency to abortion takes place, every circumſtance which can affect the

the womb immediately, or through the intervention, of other parts, will readily produce miſcarriage. Such are, fatigue from long walking or dancing, ſtraining from coughing, or from efforts at ſtool in conſequence of cholic-pains or ſevere looſeneſs, violent agitation of the body, ſudden paſſions of the mind, as exceſſive fear or joy, ſurpriſe, &c. expoſure in a heated room, tight lacing, and a great variety of other circumſtances.

Miſcarriage in every caſe is attended with diſagreeable conſequences; for by laying the foundation for the repetition of the ſame accident, it may both render the woman incapable of being the mother of a living child, and injure irreparably her general health.

In the early months of pregnancy, abortion is productive of no immediate danger, provided proper aſſiſtance be called; but after the fifth month, the life of the patient is always in a precarious ſituation, till the womb be entirely emptied of its contents.

The event of every caſe of miſcarriage

 muſt

muſt depend on the nature of the ſymptoms, and on the cauſes which induce the accident. The former of theſe has already been explained. With reſpect to the latter, where the cauſe is diſcovered to proceed from the death of the child, or from ſuch a ſtate of the mother's body that the womb cannot retain the child, ſuch as great irritability or weakneſs of the general ſyſtem, or of the womb itſelf, or irritation communicated from the parts contiguous to that organ, the threatening event cannot be prevented. If, however, *fulneſs* is obſerved to be the cauſe, or any violent paſſion of the mind, if the bearing down pains have not come on, by proper management, the woman may be yet enabled to carry the child to the full time.

It is of importance alſo to remark, that in ſome rare caſes where abortion is threatened from theſe cauſes, if the woman has conceived *Twins* or *Triplets*, one child may be expelled, and the other retained, if proper attention be paid.

The following caſe, which I have choſen out of many ſimilar ones, is a ſtriking proof of this important fact.

CASE

Case IX.

A lady, who had frequently miſcarried about the third month, having become pregnant, was put under my care.

By the ſtricteſt obſervance of the rules which I ſuggeſted, ſhe exceeded the period which had formerly been unfortunate. But at the end of the fourth month, in conſequence of a fright, ſhe was ſeized with pain in the back. Soon after which, a violent diſcharge of blood from the womb enſued, and a child, with all its appendages, was completely expelled.

This lady recovered very ſlowly, and had a continuation of the breeding ſymptoms. The country air, and cold bathing were therefore adviſed, as ſoon as her ſtrength permitted her to leave her bedchamber; and in a ſhort time, there was a viſible increaſe of bulk in the belly, attended with unequivocal ſenſation of the motion of a child.

In five months after the miſcarriage, this

this patient was delivered of a ſtout healthy boy, evidently at full time.

Such caſes ſuggeſt a caution, which ſhould never be neglected, that after miſcarriage, every patient ſhould be treated for ſome time, as if ſhe were actually ſtill with child, in order to prevent the poſſibility of a ſecond child being loſt, eſpecially as the actions of the womb, when once excited, are very readily renewed by the moſt apparently trifling irritation.

One cauſe of abortion is generally attended with more ſerious conſequences even than the loſs of a child; for it moſt commonly occaſions the death of the ther, that is where artificial means have been employed to induce miſcarriage.

Some unfortunate women, to conceal their criminal indulgences, endeavour, by various means, to procure the expulſion of the child, before it has acquired ſuch a ſize that their ſituation can be diſcovered. Theſe improper intentions can never ſucceed,

ceed, unleſs very violent effects are produced on the organs contiguous to the womb, which explains the cauſe of danger; for inflammation of theſe delicate parts is very readily excited by any violent irritation, and is liable to be communicated to all the contents of the belly.

The dangers which attend ſuch unwarrantable practices will be pointed out in a more ſtriking manner by the following caſe, than by any arguments which can be ſuggeſted.

CASE X.

I was requeſted in the year ——, to viſit a young girl, who, though delirious, called conſtantly for my aſſiſtance.

On my arrival, I learned that ſhe had had for ſeveral days a profuſe diſcharge of blood from the womb, along with exceſſive *looſeneſs*: that ſhe had complained of a conſtant violent pain in the lower part of the belly, which had gradually extended over the whole of it, and which had, for ſome time before I was ſent for, become

come ſo ſevere that ſhe could not bear the preſſure of the bed-cloaths.

I was likewiſe informed that ſhe had miſcarried, though ſhe had endeavoured to conceal the circumſtances; and t at, although the calls to ſtool were ſtill very frequent and urgent, the diſcharge of blood had ceaſed for ſome hours before my arrival.

I found her pulſe ſmall and irregular, but very ſharp, her tongue brown, the belly conſiderably ſwelled, and painful to the touch, and the womb quite cloſed, ſo that there was no longer any hazard of a return of the diſcharge of blood.

Theſe ſymptoms, notwithſtanding the uſe of opiates, *Lavemens* with Laudanum, Fomentations, &c. continued for twenty-four hours, when the patient became ſuddenly calm, and recollected: ſhe ſaid, ſhe felt no pain, and confeſſed that ſhe had been perſuaded to take medicines with a view to procure abortion; that theſe had produced violent effects on the bowels, which ſhe had concealed for ſeveral days, till the diſcharge of blood from the womb diſcovered her ſituation.

The

The unfortunate girl, thought herſelf now relieved from pain and danger; but her feelings were deluſive, for mortification of the bowels, in conſequence of inflammation, had taken place; in a few hours her limbs became cold, ſhe gradually ſunk, and expired in a fit.

Wherever, therefore, women commit ſuch unjuſtifiable crimes to conceal the indulgence of irregular paſſions, their life is expoſed to the greateſt danger.

The treatment in caſes of miſcarriage muſt be regulated by a great variety of circumſtances, particularly by the nature of the ſymptoms and cauſes, and by the conſtitution of the patient.

As the future health and happineſs of the woman muſt often depend on the proper management of ſuch caſes, recourſe ſhould always be had to the advice of practitioners of midwifery.

For the benefit of thoſe who may not be able to procure immediate aſſiſtance, from the ſituation of their reſidence, &c. the following

lowing general rules are given, as it is inconſiſtent with the plan of this work, to enter minutely into the detail of ſuch circumſtances as require knowledge of the practice of medicine, or from their importance and intricacy ſhould be referred to ſkilful practitioners.

When there is an appearance of blood, in conſequence of any of the accidents already fully explained, which threatens miſcarriage, the patient ſhould be put to bed, and kept quiet and cool; and if ſhe be of a full habit, or have ſymptoms of fever, ſhe ought to loſe blood from the arm.

By theſe means, provided regular bearing-down pains do not ſucceed the diſcharge, and if no bulky ſubſtance, or large clots of blood, are expelled, there is reaſon to hope that in ſuch caſes miſcarriage will be prevented. But when, along with the diſcharge of blood, large clots come off, attended with bearing down, or pains in the back and loins, eſpecially if the ſymptoms which precede abortion have appeared, there muſt be every probability that the threatening event cannot be obviated.

In theſe caſes, every bulky ſubſtance which

which is paſſed ſhould be kept in a baſon of water, that the excluſion of the child and its appendages may be aſcertained.

When in ſuch caſes the child alone is expelled, and violent pains ſtill continue, attended with a trifling diſcharge of blood, a ſimple *Lavement*, conſiſting of warm water and a little oil, will often moderate the pain, and promote the expulſion of the appendages of the child; for till this latter circumſtance take place, the patient cannot be completely relieved.

Where, however, under ſuch circumſtances the diſcharge of blood is conſiderable, the patient can only be effectually relieved by the aſſiſtance of an experienced practitioner. Till that can be procured, cloths dipped in cold water ſhould be applied to the lower part of the belly.

After the child and its appendages have come off, opiates may be given with advantage.

Much caution is neceſſary in the conduct of the patient after miſcarriage. She ſhould lie a good deal on a bed or ſofa for ſeveral days, and ought to take ſuch remedies as are calculated to reſtore general health.

 It

It requires great attention to prevent abortion in subsequent pregnancies, whereever it has once happened. The variety of circumstances which tend to induce miscarriage, render it difficult to include directions for every case which can occur under general heads. In this work such a task would be impossible.

The advice of even the most skilful practitioner is sometimes inadequate to the prevention of miscarriage, where the habit has become established; and indeed nothing distinguishes the abilities of a practitioner so much as his success in cases of abortion.

Where a woman has once miscarried, she should be particularly cautious in her conduct when again pregnant, about the period at which she had formerly been unfortunate. In the greatest number of cases there is a greater disposition to miscarry from the eighth to the twelfth week than at any other time, and therefore such women should be confined very much to bed for a few days before and after that period. Cold bathing, particularly by means of the shower-bath, and occasional blood-letting, with a variety of other means, have often great effect in preventing abortion; but

but as theſe can only be beneficial according to the circumſtances of the caſe, and as their uſe may be ſometimes highly improper, neither the cold bath nor bloodletting ought ever to be adviſed, without the concurrence of a judicious practitioner.

When women miſcarry repeatedly about the fifth or ſixth month, and feel previous to that accident the ſymptoms of the child's death, formerly deſcribed; and if, in ſuch caſes, the child when expelled is putrid, then ſome latent poiſon, which will yield to a particular courſe of medicines, may be ſuſpected to lurk in the conſtitutions of the parents.

SECTION X.

RULES *and* CAUTIONS *for the* CONDUCT *of* PREGNANT WOMEN.

FROM the hiſtory of the complaints to which pregnant women are liable, it will appear obviouſly, that many of them may

may be avoided by proper attention. The following general cautions are offered, with a view to accompliſh that important purpoſe.

THE complaints incident to the early months of pregnancy are different in their nature from thoſe which occur in the latter months, a different mode of management is therefore neceſſary at thoſe two periods.

Cautions in the *Early Months*. — Women during that time have a natural tendency to fulneſs; hence the diet ſhould be ſpare. Though ſedentary life increaſes that tendency, yet the exerciſe ſhould be very moderate; for every circumſtance which can cauſe fatigue ought to be carefully guarded againſt.

The dreſs of pregnant women, eſpecially at the period when the womb begins to riſe out of the baſon*, ſhould be looſe and eaſy. Tight lacing, beſides impeding the aſcent of the womb, and hence inducing

* P. 153.

abortion,

abortion, by compreſſing the breaſts, often renders women unable to ſuckle their children.

Stays are not the only parts of the female dreſs which require reformation during pregnancy; for the ordinary *Shoes* ought to be changed. When ſhoes are made with high or narrow heels, the perſon who wears them is liable to ſtumble from the moſt trifling inequality in the ground; and as ſuch an accident might be productive of much harm, every precaution ſhould be taken againſt it: therefore the ſhoes ought to be made with low and broad heels.

Crowded companies, by occaſioning many diſagreeable reſtrictions, may lay the foundation for the moſt dangerous complaint about the time when the womb riſes out of the baſon, as has been particularly explained*; and hence women in that ſituation ſhould be ſtrictly prohibited from crowded companies and public places. The impurity of the air, on ſuch occaſions, is ſufficient, in the irritable ſtate of pregnant women, to induce many very diſagreeable complaints.

* P. 196.

Women,

Women, in the early months, ſhould be very guarded in the uſe of laxative medicines, as any violent irritation of the bowels at that period is readily communicated to the womb.

The belly may be kept regular by means of ripe fruit, boiled vegetables, or any very gentle laxative, as Lenitive Electuary, ſtewed Prunes, Tamarinds, &c.

Cautions in the *Latter Months.* In the latter months, the ſtomach is not ſo apt to become diſordered, as in the early periods of pregnancy; and as a greater proportion of blood is required to ſupply the increaſed bulk of the womb and contents, a more full diet may be allowed.

The exerciſe alſo ſhould be increaſed, and, (unleſs under certain circumſtances), women, towards the end of pregnancy, ought to be as much in the open air as poſſible; riding in an eaſy carriage on good roads, alſo, is attended with the beſt effects.

Women, in the latter months, ought to be as much in chearful agreeable company

as their circumftances will allow; for otherwife they are apt to become melancholy; and it is well known that the depreffing paffions fometimes prove the fource of the moft dangerous difeafe which can occur during pregnancy.

From the very great fize of the womb at that period, it will be readily underftood, that long continued preffure of that organ on any particular part muft be productive of material injury, and a cafe has been related, where it proved the caufe of death *; therefore frequent change of pofture is abfolutely neceffary. This fhould be attended to during the night, as well as the day.

Coftivenefs, it has been formerly explained †, is always to be guarded againft with the moft fcrupulous attention during the latter months; and hence women fhould never fuffer above a fingle day to pafs without having a motion.

In every period of pregnancy, when there are evident marks of fulnefs, it fhould be removed by blood-letting, o-

* Page 214. † Page 201.

therwife

therwiſe many diſagreeable ſymptoms may occur. This will more eſpecially be the caſe in the latter months, for at that time ſuch a habit induces a tendency to be affected by convulſions.

MA-

MANAGEMENT

OF

FEMALE COMPLAINTS.

PART II.

CHAPTER I.

NATURAL LABOUR.

WOMEN are generally delivered of that burden which conſtitutes them mothers, about nine months, that is, thirty-nine weeks or two hundred and ſeventy-three days after conception; as, however, the exact period of impregnation cannot be commonly aſcertained, it is not uſual for women to reckon accurately.

As, in ſome caſes, the term of pregnancy is conſiderably ſhortened, it is probable, that in others, it is ſomewhat pro-

 tracted.

tracted. Although this has been often denied, yet, from many obſervations in my own practice, it appears to me certain beyond a doubt. In confirmation of this opinion, it may alſo be remarked, that if the term of pregnancy is often protracted for ſeveral days in other animals, it is reaſonable to ſuppoſe that the ſame circumſtance may happen in women.

In the greateſt number of caſes women are delivered without much difficulty or danger; ſuch labours are therefore ſtyled *Natural.*

Although natural labour is not attended with great danger, yet the aſſiſtance of a ſkilful practitioner is always neceſſary, in order to guard againſt accidents which might otherwiſe happen, and which might render the patient's future life miſerable. This important truth has been denied, from a miſtaken compariſon between the labour of women and that of the animals of the brute-creation; but the ſtructure of ſuch animals exempts them from thoſe hazards to which women, from their make, are neceſſarily ſubject.

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SECTION I.

SYMPTOMS *of* LABOUR.

THE approach of labour is announced by a variety of ſenſations, which, though they are certainly very diſtreſſing and diſagreeable to the woman, being occaſioned by circumſtances which are preparatory to an eaſy delivery, ought to be conſidered as favourable ſymptoms.

PREVIOUS to labour the belly generally becomes much diminiſhed in bulk, which originates from the child ſinking to the lower part of the belly.

THE firſt ſigns of labour are pains in the back and loins, which occur at irregular intervals, and which induce the moſt diſagreeable ſenſations. Theſe are occaſioned by the incipient contractions of the womb; they ſerve the valuable purpoſe of gradually opening the orifice of that organ, which, it was formerly re-

marked *, becomes closed up a short time after conception.

The consequence of this effect of the contractions of the womb, is the discharge of that substance which had closed it up, that is of a slimy matter, often slightly tinged with blood, called in common language, the *Shews*.

WHEN these symptoms have continued for some time, the patient becomes very uneasy; she has frequent warm and cold fits, with urgent desire to make water, &c. and is exceedingly restless, as every situation appears unsupportable and uncomfortable to her.

By degrees the pains increase in frequency and force; they occur at regular intervals of ten or twelve minutes, and do not then occasion the continued uneasiness which is felt at first; for when they are off, the patient usually is perfectly relieved.

THESE are the marks by which women may judge themselves to be in labour; but as pains often occur in the latter months of pregnancy,

* Page 153.

pregnancy, which may deceive them, it muſt be an important object to point out the mode of diſtinguiſhing them from the true labour pains, as otherwiſe they may be kept for ſeveral days in a ſtate of anxiety and diſtreſs.

Spurious pains, as they are called, occur moſt commonly towards the evening, and are moſt troubleſome during the night; they are more trifling and irregular than true pains; and as they produce no change on the orifice of the womb, the *Shews* do not ſucceed them.

Spurious pains are occaſioned by the preſſure of the womb upon the parts which ſurround it, or by coſtiveneſs. In the former caſe, they will be removed by change of poſture and opiates; and in the latter they can only be obviated by the coſtive ſtate of the belly being remedied.

In many women ſpurious pains are attended with a diſcharge which ſomewhat reſembles that produced by true pains; a circumſtance which is apt to impoſe on the patient, and on ſome practitioners; hence in many caſes it requires a conſiderable degree of judgement to diſtinguiſh

ſpurious

ſpurious from true pains. From inattention in that reſpect, I have been called to many women who have been deemed ſeveral days in labour, when in fact labour had not commenced.

SECTION II.

MANAGEMENT *at the* BEGINNING *of* LABOUR.

EVERY woman in general is impreſſed with much apprehenſion at the beginning of labour, which, if indulged, may be productive of very bad effects; it is therefore important that a chearful friend or two ſhould be preſent on ſuch occaſions, in order to inſpire the patient with ſpirits and courage.

HEATING drinks, by way of cordials, are too often preſcribed by the attendants at the beginning of labour. They increaſe the natural tendency to fever which women have at that time, and the temporary vigour which they induce is ſoon followed by

by a great degree of languor, which retards the delivery.

When labour has actually commenced, the bed on which the patient is to be delivered requires a little preparation, that it may not remain wet and diſagreeable after the delivery, which would prove very injurious to the woman.

Nurſe-keepers, generally, are very well acquainted with the make of the bed neceſſary for lying-in. The following directions, however, for that purpoſe, will be found uſeful, where ſuch women are not to be had.

The bed ſhould be placed in ſuch a ſituation that the room may be properly ventilated, without the patient being expoſed to a current of air; it ſhould alſo be kept at a little diſtance from the wall. The bed curtains ſhould be made of thin materials, ſuch as cotton or linen; they ought to be quite clean, and ſhould never be completely drawn round the bed, otherwiſe freſh air will not be admitted, nor the foul air allowed to eſcape.

A hair-mattreſs ſhould be placed over the feather-bed, and over it one or more

dreſſed

dreſſed ſheep-ſkins, or a piece of oiled cloth ought to be ſpread; a pair of clean ſheets ſhould then be laid on in the ordinary way, and another pair in the form of a roller, muſt be applied acroſs the bed, having the ends folded in at the ſides. The under ſheet at the foreſide of the bed ſhould be preſſed in, and the upper ſheet, when turned over the bed-clothes and outer covering, ſhould be ſecured by means of a needle and thread, by which no obſtacle will impede the neceſſary aſſiſtance of the practitioner.

A coarſe blanket, folded within a ſheet, in the form of a table napkin, ought to be laid immediately below the patient, and ſhould be removed after delivery.

The pillows ought to be placed in ſuch a manner, that the face of the woman, when ſhe is on her left ſide, may be towards the back of the bed.

By adopting theſe directions, women will not be expoſed to cold during labour; they will be comfortable after delivery, without being much diſturbed, while they

can

can receive all the neceſſary aſſiſtance without inconvenience.

The dreſs of women during labour ought to be as light and ſimple as poſſible, that it may not overheat themſelves or embarraſs the practitioner.

When labour has really commenced, the bowels ſhould be emptied by means of an emollient *Lavement*, otherwiſe the moſt diſagreeable circumſtances may occur.

SECTION III.

Means *by which the* Child *is* Expelled.

In natural labour the head of the child comes down foremoſt, and is wonderfully accommodated to the paſſage through which it proceeds.

The general manner in which the child paſſes through the baſon has been already accurately deſcribed *; the obſtacles which

* Page 90.

are oppoſed to its progreſs prevent it from falling out of the womb by its own weight, and ſerve the important purpoſe of guarding from injuries the delicate parts through which it is expelled.

Nature has therefore provided a particular apparatus for the expulſion of the child; for by the reiterated contractions of the womb, aſſiſted by the midriff and muſcles of the belly, that neceſſary operation is performed.

The firſt contractions of the womb are employed in preparing the parts for the paſſage of the child, for they puſh forward the lower part of the membranous bag, with ſome of the water, in which the child is contained *, like a ſmall bladder, which being inſinuated between the edges of the orifice of the womb, gradually forces them aſunder, and, increaſing in ſize in proportion as they are ſeparated, continues to open the orifice, and the ſuperior part of the vagina, till they are ſufficiently enlarged to admit of the entrance of the child's head. Four, ſix, or

* Page 157.

eight hours commonly elapſe before this happens.

By this means, theſe delicate and acutely ſenſible parts are not expoſed to the injuries which would enſue from their being ſuddenly forced open. Women, therefore, inſtead of becoming impatient during the firſt hours of labour, ſhould conſider, that the more ſlowly their delivery proceeds at that period, the more certain will be their chance of a ſpeedy recovery.

After the paſſages are ſufficiently prepared, the membranous bag burſts, and the waters are diſcharged: this is generally followed by a temporary remiſſion of the pains.

This interval, however, does not continue long; for the unequal parts of the child preſſing on the womb, along with the diminution of bulk of that organ, excite more violent contractions, which then induce the action of the midriff and muſcles of the belly; and thus ſtrong bearing-down pains are occaſioned.

The head of the child then enters the cavity of the baſon, and, by the continued action of the womb, &c. it is gradually

ly puſhed through it in the manner already mentioned *, till it arrives at the under part. When it has advanced ſo far, its further progreſs is retarded for ſome time by the fleſhy parts ſituated at the bottom of the baſon †: by degrees, however, theſe yield to the continued pains, and at laſt the head of the child is excluded.

The relief which the woman now feels from all pain is only temporary; for, after a minute or two, the contractions of the womb, &c. again begin, and puſh forwards the remaining parts of the child, which, after being accommodated to the turns of the baſon, are completely expelled, followed by a conſiderable diſcharge of water, mixed with a little blood.

Sometimes women, ſoon after the waters are diſcharged, have one continued bearing down pain till the delivery of the child; while, in others, the pains recur at diſtant intervals, and increaſe in force and effect by degrees only. The former of theſe circumſtances more uſually happens in women who have had ſeveral children,

* Page 50. † See Introduction; p. 62.

and

and the latter in thoſe who lie-in for the firſt time.

SECTION IV.

MANAGEMENT *neceſſary during the* EXPULSION *of the* CHILD.

WHEN the contractions of the womb tend only to prepare the paſſages, no aſſiſtance is neceſſary. The woman ſhould be kept quiet and cool, though ſhe ought not to be confined to one poſture. Violent agitations of the body muſt be carefully guarded againſt, otherwiſe the waters may be diſcharged prematurely; and hence the moſt diſagreeable conſequences might enſue.

For theſe reaſons, the frequent interference of a practitioner in the beginning of labour, would be productive of much harm, and could be attended with no good effects.

At that period, no medicine or other expedient for increaſing the force of the pains, ſhould be preſcribed, as the more ſlowly the

the paſſages are enlarged, the leſs injury will the patient ſuffer.

WOMEN frequently vomit during the firſt hours of labour. No danger, however, is to be apprehended from that complaint, if the patient has had no previous diſeaſe. On the contrary, the vomiting often accelerates the delivery. If, under theſe circumſtances, there are evident marks of a diſordered ſtomach, Green Tea, or an infuſion of Chamomile Flowers, with a few Drops of Spirit of Hartſhorn, ſhould be drank.

WHEN the child begins to paſs through the baſon, many women are ſeized with ſhivering fits, which generally announce an expeditious delivery, and are to be conſidered dangerous in thoſe caſes only where the ſtate of the woman's former health has been bad.

THE bearing-down pains, by which the child is forced through the paſſage, ſhould be the effort of nature alone, and ought not to be aſſiſted by the exertions of the woman; for in that event, the child would either

either be pushed upon the parts at the outlet of the bason, before they are prepared for it, or the woman would be so much worn out, that she could not undergo the necessary fatigue which attends the complete expulsion of the child.

This important caution cannot be too strongly inculcated; for inattention to such conduct, and the impatience which women in such situations cannot perhaps avoid, often make a labour difficult and painful, which would otherwise have been natural and easy. Voluntary bearing down must be particularly guarded against at the time when the head of the child is only prevented from being born by the soft parts at the outlet of the bason; for if the delivery be then hastened, these parts will be readily torn; and in consequence, the woman's future life must be rendered miserable.

The management of a skilful practitioner is indispensably necessary, to prevent so unfortunate an accident, in every case, where, from the acute feelings of the patient, violent bearing-down at that period cannot be avoided.

From

From inattention to this important duty on the part of practitioners, many women have been reduced to the moſt pitiable condition in which human beings can be found.

AFTER the head of the child is excluded, the woman ſhould be allowed to enjoy for a little the temporary relief which ſhe feels, and therefore the body ought not to be immediately pulled out with force, as is often done; for beſides the injuries which may be occaſioned by not allowing the patient a little reſt, the delivery of the afterbirth will be thereby rendered difficult. Two or three minutes ſhould therefore be allowed to elapſe, before the body be drawn forward.

THE child ſhould not be ſeparated from the mother till the navel-ſtring be properly tied, ſo that no blood may be diſcharged from the divided veſſels, an accident which might prove fatal. Unleſs, however, the child has diſcovered evident ſymptoms of life, it ſhould not be diſengaged from the mother, till proper means are employed for its recovery, except on particular occaſions,

casions, which will be explained in another part of this work.

SECTION V.

MEANS *by which the* APPENDAGES *of the* CHILD *are* EXCLUDED.

THE appendages of the child are thrown off by an effort of nature alone in by far the greatest number of cases: For this purpose, the most simple, as well as most powerful means are employed.

When the delivery of the child has not been conducted with too much hurry, the womb diminishes in size in a very gradual manner, in proportion as its contents are expelled.

It is in this manner prepared for contracting regularly from above downwards, after the woman has recruited from the fatigue of the former stages of labour.

After the patient, therefore, has rested for some time, she again feels pains, which are occasioned by the womb renewing its

contractions. They are termed grinding, from their being much lefs violent than thofe by which the expulfion of the child was accomplifhed.

When thefe contractions have continued for a certain time, the after-birth, &c. is feparated, and then thrown off, and the fides of the womb become every where in clofe contact.

By this means, the orifices of thofe large blood-veffels which are ruptured by the feparation of the after-birth, are ftopped up, and confequently the difcharge of blood, which might otherwife prove the fource of the greateft danger, is prevented.

The appendages of the child are generally expelled within from ten minutes to an hour after delivery.

SEC-

SECTION VI.

ASSISTANCE *necessary during the* EXCLUSION *of the* AFTER-BIRTH.

BEFORE the after-birth is excluded, it is an important object to discover if there be any other child in the womb, and therefore that must be ascertained immediately after one child is born. The marks by which the presence of twins, triplets, &c. may be distinguished, will be described in a subsequent chapter.

In assisting the delivery of the after-birth, the practitioner must wait for the contraction of the womb; for if that be not attended to, the most dangerous consequences may follow. It is of great importance that this circumstance should be properly understood; for the patient's life, after an easy labour, may be destroyed by the rashness of an ignorant practitioner. By explaining, however, the cause of danger, those who are prevented from being un-

der the care of perſons of ſkill, may be enabled to counteract the effects of ignorance, and will thereby eſcape thoſe hazards to which they would otherwiſe be expoſed.

The greateſt portion of the womb at the full period of pregnancy, it has been remarked *, is quite unconnected with any of the neighbouring parts, and is therefore unſupported. It has alſo been obſerved, that the after-birth is moſt generally attached to its bottom †. If, therefore, the extraction of the appendages of the child be attempted before the womb contracts, the inſide of that organ will be turned out; and if the raſh practitioner continues to pull down, the inverted womb will be drawn out of the woman's body, and death will ſoon follow. This unfortunate accident will be more particularly deſcribed in the third part of this work.

THE following caſe will probably prove this important truth better than the cleareſt reaſoning could poſſibly do.

* Page 154. † Page 162.

CASE

CASE XI.

A midwife, dead ſome years ago, attended a lady in the ſuburbs of Edinburgh, who had been ſeveral years married before ſhe became pregnant.

The pleaſure which that event gave her huſband and herſelf, made her look forward to the time of child-bearing with impatience, and inſpired her with confidence and courage when it arrived.

Her labour proved tedious; but ſhe was at laſt, without any extraordinary aſſiſtance, delivered of a fine healthy child. The midwife unfortunately had received a meſſage to another patient immediately before this event took place; hence ſhe was impatient to finiſh the reſt of her duty, that ſhe might get away. Without waiting, therefore, for the contractions of the womb, ſhe pulled by the navel-ſtring with great force, while the patient was in that languid ſtate which generally ſucceeds a tedious labour.

She

She continued her raſh efforts in ſpite of the violent agonies of the lady, till ſhe had drawn the womb completely out of the body, when convulſions were induced.

I was immediately ſent for, and arrived within three quarters of an hour after the delivery; but the unhappy patient had died a conſiderable time before my arrival.

The womb and the paſſage were both completely turned inſide out, and the after-birth was adhering very firmly.

When the grinding pains are felt, by which the contraction of the womb is diſtinguiſhed, the practitioner then ſhould aſſiſt the expulſion of the after-birth, by pulling gently by the navel-ſtring during a pain, and by endeavouring to bring down the after-birth through the baſon, in ſuch a manner that its progreſs may not be interrupted by any of the neighbouring parts.

While

While the aſſiſtance thus deſcribed is given by the practitioner, the patient ſhould bear down moderately; all violent exertions, however, ſhould be avoided; for by coughing, ſneezing, &c. dangerous ſymptoms might be induced.

The contractions of the womb, when ſlow, may be aſſiſted, by gently rubbing the belly of the woman with the hand. Stimulating medicines or *Lavemens* for this purpoſe ought never to be employed.

SECTION VII.

GENERAL OBSERVATIONS *on* NATURAL LABOUR.

NATURAL labour treated in the manner directed, is never productive of any diſagreeable conſequence, though the temporary ſufferings of the patient are ſometimes particularly diſtreſſing. Lying-in women under the care of a ſkilful practitioner have very little to fear, provided

vided their health be good, as by far the greateſt proportion of labours are natural.

The depreſſing paſſions which occur perhaps unavoidably at the beginning of labour, are therefore quite groundleſs. As their effects may be very dangerous, they ſhould be peculiarly guarded againſt.

A very improper method is almoſt univerſally adopted for this purpoſe, both by practitioners and attendants; for the dangers which may happen during child-bearing are carefully concealed from the patient.

As every woman muſt have acceſs to learn many hiſtories of the moſt melancholy events having occurred during labour, the more theſe are attempted to be concealed, the patient will imagine herſelf expoſed to the greater riſk of danger.

But if the real circumſtances of every unfortunate caſe were properly explained to women, a very oppoſite effect would be produced; for they would find that very few unfortunate accidents have happened during child-bearing, where proper atten-

tion

tion had been paid, and where the conftitution of the patient had not been previoufly injured.

It will perhaps, therefore, appear a duty incumbent on every humane practitioner, to point out the dangers to which women may be expofed during labour by improper management, that they may adopt the neceffary means to prevent them. For the fame reafon, it fhould not be concealed, that many dangers attend that ftate, even in the healthieft conftitutions, as will be proved in a fubfequent chapter, which fortunately can be obviated by the affiftance of a fkilful practitioner.

CHAPTER II.

LINGERING LABOURS.

WHEN delivery is not accomplifhed within twenty-four or thirty hours after the womb has begun to contract, the labour may be termed *Lingering*.

In ſuch caſes, much management becomes neceſſary, to prevent the patient from being worn out by anxiety and apprehenſion; and much judgement is required to diſtinguiſh thoſe obſtacles which will yield in a little time, by the continuance of labour-pains, and cannot therefore occaſion danger, from thoſe which can be overcome only by the interference of the practitioner.

By a knowledge of the cauſes of lingering labours, women may be enabled to avoid that anxiety and impatience which contribute in a conſiderable degree to retard delivery. This chapter is dedicated to that purpoſe.

SECTION I.

LABOURS *rendered* LINGERING *by Improper* MANAGEMENT.

THE officious interference of ignorant practitioners is a frequent cauſe of lingering labour; for if aſſiſtance is attempted

tempted to be given before the paſſages are prepared for the delivery of the child, the encreaſed action of the womb, &c. will only tend to weaken the patient, and to render her incapable of making thoſe exertions, on which the ſucceſsful and expeditious termination of labour may depend.

The improper regulation of the paſſions of the mind very often interrupt and retard the progreſs of labour. If, therefore, a practitioner, inſtead of inſpiring the patient with courage, either totally neglects ſpeaking to her, or looks afraid, delivery will inevitably be retarded.

Hence, every circumſtance which can occaſion any violent paſſion of the mind, ſhould be carefully guarded againſt.

When the patient is kept too long in one poſition, and too ſoon made to believe that ſhe is in actual labour, ſhe naturally becomes tired; her ſtrength is worn out, and the pains go off, or occur only at irregular diſtant intervals.

A variety of treatment, ſuited to the circumſtances of different caſes, will be neceſſary

ceſſary in labours which are protracted from improper management.

When the ſtrength is exhauſted, nouriſhing food and cordials ſhould be given; and in every ſuch caſe, occaſioned by this cauſe, an opiate may be ordered with the very beſt effects.

THE moſt proper nouriſhment during labour, is Beef-tea, Chicken-water, and Calves-feet or Hartſhorn jelly; and the beſt cordials are Tea, Coffee, or Barley-Cinnamon water.

SECTION II.

LABOURS *rendered* LINGERING *by the* POSITION *of the* CHILD.

IN natural labour, it has been obſerved, the head of the child enters the baſon in that poſition which occupies the leaſt poſſible ſpace. It ſometimes, however, happens, that it comes down in a direction which requires more room than uſual. It

will

will not therefore appear surprising, that under such circumstances, a longer continued action of the womb and assisting powers will be required to expel the child.

When, however, no other obstacle prevents delivery, the improper situation of the child's head proves a temporary impediment only; and although it may occasion more painful feelings to the patient, than if the labour were strictly natural, yet if the pains be strong and forcing, she will be as safely delivered as if every thing had been perfectly favourable.

But when, along with the improper position of the child's head, the pains of labour become weak, and delivery is in consequence retarded; then, unless the position is altered by the management of a skilful practitioner, the violent pressure which must be induced on the neighbouring delicate parts, will be productive of much injury.

Fortunately the structure of a child's head is so admirably contrived, that when it enters the bason in a bad position, it excites an irritation on the womb, which makes

makes it contract with unusual force; hence in such labours the pains are generally violent and forcing.

Although in the greatest number of these cases the labour will be terminated safely by waiting a certain time; yet the assistance of a dexterous practitioner may often relieve the patient from many hours severe suffering. It must not, however, be concealed, that unless an experienced practitioner has the charge of the patient, nature alone should be trusted, as ill-directed attempts to assist, may, in such cases, be the occasion of the most unfortunate effects.

SECTION III.

LABOURS *rendered* LINGERING *by the* FORM *of the* WOMAN.

IT has already been remarked, that the passage through which the child proceeds during labour, is not equally well formed in all women; for the human body

dy is ſubject to a diſeaſe, from which other individuals of the animated creation are exempted *.

Where the deviation from the natural ſhape and ſize is not very conſiderable, although a longer time than uſual will be required; yet the delivery may at laſt be accompliſhed with ſafety, both to the mother and child.

In ſuch caſes, women ſhould not become impatient or reſtleſs, otherwiſe they will be ſoon worn out, and their delivery may be rendered impoſſible without extraordinary aid.

The duty of practitioners, on theſe occaſions, is to allow the pains of labour to have all the effects which they can produce, to ſupport the patient's ſtrength, and to prevent her ſpirits from being depreſſed.

It requires much ſkill and experience to diſtinguiſh between the appearance and reality of danger in many caſes, but eſpecially in labours rendered tedious by deformity of the baſon. It is aſtoniſhing how

* Page 107.

much pain ſome women can ſuffer without material injury; and the manner in which the child's head is moulded by the form of the paſſage, is often ſurpriſing. Perhaps no circumſtance in nature is better calculated to prove the exiſtence of an omnipotent guardian Power, than the admirable proviſion which is made for the delivery of the child.

The conduct of thoſe practitioners, therefore, who intrude on the works of Nature, muſt be highly culpable; and hence, except where ſhe fails, every ſenſible, prudent practitioner will exert his endeavours rather to prevent her intentions from being counteracted by improper interference, than to preſume to offer to aſſiſt her.

The form of the baſon is not the only circumſtance in the make of women which may retard delivery. The fleſhy parts through which the child muſt neceſſarily paſs, often occaſion much reſiſtance. This more generally happens in women who are advanced in life before they begin to have children.

A variety of expedients have been propoſed in ſuch caſes for expediting the delivery,

livery, the moſt of which are highly improper. In proportion as the fleſhy parts are rigid, a greater length of time will be neceſſary for preparing them for the ſafe paſſage of the child. But if it be forced through them before ſuch preparation, they may either be lacerated, or ſo violently bruiſed, that very diſagreeable and dangerous complaints may be induced.

Every means, therefore, which tend to increaſe the force of the labour-pains, where the delivery of the child is oppoſed by the unyielding ſtate of the fleſhy parts at the bottom of the baſon, ſhould be carefully avoided.

Fomentations and other expedients for promoting the relaxation of theſe parts, have alſo been recommended. But except the uſe of pomatum, all the other propoſed means for ſuch an effect, by inducing a great tendency to ſubſequent inflammation, may be the cauſe of much future diſtreſs, and ought conſequently never to be had recourſe to.

CHAPTER III.

DIFFICULT LABOURS.

IT ſometimes happens, that although the head of the child is next the baſon, yet the delivery cannot be accompliſhed by the efforts of Nature alone: — Such labours are termed *Difficult* or *Laborious*.

Theſe caſes require the interference of a ſkilful practitioner, by whoſe aſſiſtance, by means of inſtruments, in general they may be terminated with ſafety to the patient, though it ſometimes becomes impoſſible to ſave the child, without expoſing the mother to much danger.

The inſtruments moſt commonly employed in the practice of Midwifery, are conſtructed in ſuch a manner, that neither the patient nor child can be injured by them.

SECTION I.

LABOURS *rendered* DIFFICULT *by the particular* STRUCTURE *of the* CHILD.

WHEREVER the child's head exceeds considerably the dimenſions formerly detailed *, if the baſon be of the ordinary ſize, an obſtacle muſt be oppoſed to delivery, which can only be ſurmounted by a diminution of its bulk.

The ſize of the head may be increaſed in conſequence of a diſeaſed ſtate, called water of the head; or the ſame effect with regard to delivery, will be produced by that ſpecies of monſtroſity, where two children are grown together, or where one child has two heads.

The former of theſe caſes is by much the moſt frequent occurrence, and yields to the moſt ſimple management; the latter occurs, fortunately, very rarely.

* Page 90.

WHEN the head is perceived to be enlarged by a collection of water, it is not always neceſſary to diminiſh it by artificial means, as Nature often adapts it in a wonderful manner to the parts through which it paſſes, and therefore time ſhould be allowed for ſo important a purpoſe.

But when it is found, that although the labour-pains have been ſtrong and forcing, the head does not ſeem to make much progreſs, then it becomes neceſſary to let out the water, by which means the ſize of the head is immediately reduced, and the delivery will ſoon be accompliſhed. It has often been alleged, that little caution is required either in having recourſe to this operation, or in performing it; for no child born under ſuch circumſtances can ever live any conſiderable time.

As, however, it is highly preſumptuous to limit the powers of Nature, no operation, which may be injurious to life, ſhould ever be attempted, without the moſt urgent neceſſity for it; and when it is had recourſe to, every caution ſhould be obſerved

ſerved which can tend to prevent danger.

In ſome caſes, the water can be diſcharged by ſo ſmall a puncture, that no injury will be done to the child's life.

WHERE the obſtacle to delivery is occaſioned by a double head, much dexterity is required to extract the child without diminiſhing one of the heads, an object which ſhould always be attempted, though the efforts for that purpoſe ſhould not be carried too far, nor continued for too long a time.

SECTION II.

LABOURS *rendered* DIFFICULT *by* IMPROPER TREATMENT.

WHEN, from improper management, the water which ſurrounds the child, is evacuated, before the mouth of the womb be ſufficiently opened, or where the

woman

woman has been allowed to take ſtimulating drinks; what would have been a natural labour, becomes a very difficult one, from the pains going entirely off.

In theſe caſes, if the child's head is not actually in the paſſage, the patient ſhould take an opiate, and be permitted to reſt for ſome hours; after which the pains probably will return.

But when the head is already within the baſon, from the preſſure on the delicate parts contained within that part, conſiderable injuries may be occaſioned, and therefore the ſafety of the woman muſt depend on expeditious delivery.

In former times, no mechanical expedient with this intention could be employed without endangering the life of the child; but fortunately at preſent, ſkilful practitioners are enabled to deliver the woman in many caſes where Nature alone cannot be truſted, without injuring the child in any degree.

Many women are improperly impreſſed with a rooted antipathy againſt the uſe of inſtruments, a circumſtance which is perhaps to be attributed principally to the

faults

faults of practitioners. It has long been a popular study to declaim against iron-hands, as they have been opprobriously styled; and however hackneyed the subject, it is still very often introduced.

Such opinions proceed either from interested motives, or from prejudices founded on ignorance. For in the hands of those practitioners who alone should employ instruments, no bad consequences can ever follow their use; and by their means, lives, which would otherwise be lost, are very often saved.

In the beginning of this century, when the art of midwifery was making a rapid progress towards that improved state in which it now is, perhaps the ardent zeal for improvement, shewn by the various practitioners in that line, might have rendered instruments more frequently used than was really necessary. But this is by no means the case at present; for the powers of Nature are now always allowed to exert their full influence, before a practitioner attempts to interfere materially.

Although the use of instruments in the hands of a skilful assistant, are not productive

ductive of any bad consequence; yet it must not be concealed, that considerable practice and experience, with a complete knowledge of the subject, are essentially requisite, otherwise much harm may readily be done. Operations in midwifery require more dexterity than those of surgery in general, and their event is of greater importance, as two lives are at stake.

The conduct of those women, therefore, is highly reprehensible, who insist on their delivery being finished by mechanical expedients, whenever the labour-pains are not strong and forcing. In such cases, the practitioner has occasion for the exertion of determined courage, to resist the improper solicitations of the patient, and ignorant attendants.

Extraordinary assistance during labour should never be given, except after the most deliberate examination of every circumstance of the case; and therefore no prudent and honest practitioner has occasion to conceal the use of instruments, at least from the attendants of the patient.

SECTION III.

LABOURS *rendered* DIFFICULT *by the* FORM *of the* WOMAN.

WHEN, from the cauſe already explained *, the baſon of a woman becomes deformed or diminiſhed in capacity, her labour muſt be rendered difficult in proportion to the degree of deficiency of ſpace.

In the greateſt number of ſuch caſes, the deformity is not ſo conſiderable, as to prevent the delivery, under proper management, of a living child, although the ſufferings of the patient muſt be unuſually diſtreſſing.

Unfortunately, however, it ſometimes happens, that the paſſages through which the child ſhould proceed, are ſo contracted, that the woman cannot poſſibly be delivered of a living infant at full time.

* Page 103.

When theſe caſes are under the care of an ignorant or timid practitioner, the life of the patient muſt be expoſed to very great danger; for by the continued action of the womb, the child is forced violently againſt the bones of the baſon; hence the fleſhy parts which are interpoſed are much bruiſed, and therefore inflammation will be ſoon induced, which, extending to the neighbouring parts, will at laſt put a period to the life of the unfortunate woman.

Theſe are not the only hazards which may enſue from the unſkilful management of the practitioner, where there is a conſiderable defect in the capacity of the baſon; for by delaying too long affording the proper and neceſſary aſſiſtance, the ſtrength of the woman may be worn out, and ſuch a ſhock given to the general ſyſtem, that her recovery will be either very precarious, or incomplete.

The truſt repoſed in practitioners by women under ſuch circumſtances, ought therefore to be conſidered as a charge of the moſt ſacred nature, and ſhould never be undertaken, except by thoſe, who from obſervation,

obſervation founded on practice, feel themſelves adequate to the important taſk.

To determine on the proper time in ſuch caſes, for giving aſſiſtance, in order to ſave the patient's life, and to accompliſh ſo deſirable a purpoſe, muſt be objects of the greateſt moment, and ought not to be intruſted to the care of every practitioner; for more judgement and dexterity are often required to fulfil theſe views, than are neceſſary in the treatment and performance of the moſt complicated chirurgical operation.

This important truth can only be controverted by thoſe who are ignorant of the ſubject. It ought to be univerſally known, as it may tend to ſave many valuable lives. It cannot be too much regretted, that women often put themſelves under the care of common female practitioners, when their own lives, and that of their children, are in danger, when they would not ſubmit to the moſt trifling external operation, under the hands of an ordinary ſurgeon.

Some melancholy caſes, which have occurred to me within theſe few years, in-

duce me to make theſe obſervations, which I conſider as incumbent on me, from every principle of duty and humanity.

The parts within the baſon on ſome very rare occaſions, in a diſeaſed ſtate, oppoſe obſtacles to delivery. As much diſcernment in the treatment of theſe caſes is required, as in the management of thoſe already mentioned.

SECTION IV.

General Observations *on* Lingering *and* Difficult Labours.

FROM the remarks which have been made on *Lingering* and *Difficult* labours, it muſt be obvious, that theſe may be often occaſioned by the impropriety of conduct of the patient or practitione .

Women of violent paſſions, accuſtomed to the unlimited gratification of all their de-

ſires,

ſires, do not eaſily ſubmit to the neceſſary reſtrictions during labour; their ſtrength therefore becomes worn out by reſtleſſneſs and anxiety, and their delivery is in conſequence either retarded, or rendered difficult.

The diſpoſition, however, of the female ſex is generally ſo amiable, that women are much more patient and reſigned during pain, than could be ſuppoſed by men, who commonly do not poſſeſs ſo great a ſhare of theſe happy qualities; therefore obſtacles to delivery do not very often originate from the improper conduct of women, where the practitioner is capable of offering prudent advice.

The greateſt number of lingering and difficult labours, where the health and conſtitution of the patient are not previouſly impaired, ſhould with juſtice be attributed to the officious and ill-directed interference of ignorant practitioners.

It ought therefore to be conſidered an object highly intereſting to mankind, to prevent the fatal errors which may ariſe from unſkilful management during labour.

bour. Every feeling mind muſt be much ſhocked on reflecting, that other countries poſſeſs in this reſpect an important ſuperiority over Great Britain; for in every other civilized ſtate of Europe, precautions are adopted by the police, which preclude ignorant practitioners from the charge of lying-in women.

Till within theſe few years in this iſland, ſo celebrated for the ſucceſsful cultivation of the arts and ſciences, midwifery was degraded to a mechanical profeſſion alone; the bodies of women, it would ſeem, were conſidered as inanimate machines, capable of ſuffering, without injury, all the accidents which may happen during childbed under improper treatment; and even the lives of children, ſo intereſting to ſociety and to individuals, appear to have been diſregarded.

Every one who is not inſenſible to the intereſts of humanity, muſt wiſh that the real nature of the truſt repoſed in practitioners of midwifery, which has, till lately been overlooked, ſhould be perfectly and univerſally underſtood; for by that means

means many unfortunate accidents will be often prevented.

Although the impropriety of thoſe women becoming pregnant whom their particular form renders incapable of bearing living children, might perhaps be eaſily ſhewn, it is not conſiſtent with the nature of this work to adduce arguments on ſuch ſubjects; for they might probably only tend to intimidate thoſe who have already put it out of their own power to profit by them.

Much management in the treatment of lingering and difficult labours is frequently neceſſary.

In lingering labours, the principal duty of the practitioner conſiſts in allowing the powers of Nature to produce their full effect, and to remedy thoſe circumſtances which may tend to impair them.

In difficult labours, on the other hand, where aſſiſtance becomes neceſſary, the proper time for interfering, and the manner of aſſiſting ſuited to different caſes, muſt be his important ſtudy.

On

On ſome occaſions, the ſymptoms of theſe two ſpecies of labours ſo nearly reſemble each other, that it is not eaſy to draw the line of diſtinction between them. That, however, is an object of great importance, becauſe the life of the child or mother may be ſacrificed by a miſtake in ſuch caſes.

While a prudent practitioner will never interfere unneceſſarily, he ought to guard particularly againſt trying what nature will ſuffer, rather than what ſhe will accompliſh, by delaying that aſſiſtance which art can ſupply.

CHAPTER IV.

PRETERNATURAL LABOURS.

WHEN the child preſents any other part than the head to the paſſage, the labour is called *Preternatural*; in common language, a *Croſs-birth*.

In the greateſt number of Preternatural labours, the life of the woman is not expoſed to hazard, though that of the child is

is generally in danger, unleſs proper aſſiſtance be afforded.

In ſome caſes, however, the ſituation of the child is ſuch, that unleſs it be altered, the woman will die. Fortunately, the practice of midwifery is now ſo much improved, that except where the caſe has been originally very improperly treated, there is ſcarcely a bad ſituation in which the child may be found, which cannot be remedied by an experienced practitioner.

SECTION I.

Preternatural Labours, *where the* Life *of the* Patient *is expoſed to no* Danger.

IT has been already mentioned, that the child, when in the womb, occupies the leaſt poſſible ſpace, and forms an oval figure, one end of which is commonly placed towards the baſon; although the end formed by the head is moſt uſually in that ſitua-

tion, the other extremity, it has been calculated, once in fifty cafes is found there.

The Breech, Knees, or Feet of the child are therefore the parts which are firft forced into the paffage more frequently than any other, except the head.

In all thefe cafes, if the woman be healthy, the delivery may be accomplifhed without any extraordinary affiftance, with perfect fafety to the patient; but the life of the child is often very much endangered.

This circumftance originates from the child being expofed to the compreffion of the womb a longer time than in cafes where the head is firft in the paffage, which is occafioned by the increafed fpace which it then occupies. This will be eafily underftood, from the manner in which the child is expelled when any of its lower parts come down firft; for in proportion as the body advances, the arms are pufhed up towards the head, till at laft they are placed along each fide of it, confequently they increafe its fize.

Another caufe, which certainly contributes to render the delivery lefs expeditious in thefe cafes, is, that the lower parts of the

child

child are ſeldom forced into the paſſage in that direction in which they take up the leaſt poſſible room. Hence it requires a long time before the contractions of the womb can have the effect of adapting them to that ſituation.

Unleſs, therefore, aſſiſtance be given in all theſe caſes, there is always a riſk of the child being expoſed to hazard; and if the practitioner does not proceed with caution and gentleneſs, ſome of its parts may be injured.

I have ſelected the following Caſe, out of a great many ſimilar ones which have occurred to me, to prove this obſervation.

CASE XI.

I was called, ſome years ago, to ſuperintend the delivery of a lady when the feet of the child came firſt down.

The practitioner unfortunately proceeded with too much precipitation, and in his endeavours to diſengage the arms, on which the expeditious delivery of the child in ſuch

cafes muft generally depend, fractured one of them above the elbow.

The conduct of this gentleman after the accident merits much praife: for inftead of concealing it, he, immediately on the birth of the infant, mentioned the circumftance, and employed the proper means for relief with fuch fuccefs, that in a fortnight the arm was almoft as well as if it had not been broken.

A certain degree of dexterity is required to deliver the head of the child in thefe cafes after the body is expelled. Force is not only unneceffary, but even very improper, as the tender neck of the infant may be diflocated, or even the body feparated, and the head left within the womb; an accident which muft be very fhocking, and which formerly was not uncommon.

The following cafe fell under my obfervation a few years ago.

CASE XII.

A midwife, when attending a lady, difcovered that the child's breech was in the paffage. Poffeffed of a good opinion of her own abilities, fhe flattered herfelf that fhe was capable of managing the delivery without any extraordinary aid, although fhe well knew that fuch cafes fhould not properly be undertaken by midwives.

Some of the attendants, however, on being informed of the cafe, infifted on my being called. The practitioner, therefore, anxious to enjoy exclufively the credit of the delivery, refolved to endeavour to accomplifh it before my arrival.

For this purpofe fhe began to pull by the lower parts of the child, with fuch violence, that the neck gave way; and I arrived only in time to be fhocked with the appearance of the laft ftruggles of the butchered infant.

WHILE too much rafhnefs cannot be reprobated in fufficiently ftrong terms, excef-

five

five timidity, as it may be as fatal to the child, should be as carefully avoided. A proper degree of steady resolution, equally distant from rashness and timidity, while it enables a practitioner to operate in these cases with success, can only be the result of dexterity, and a perfect acquaintance with the manner of operating.

SECTION II.

PRETERNATURAL LABOURS, *where the* LIFE *of the* PATIENT *is exposed to* DANGER.

WHEN the child lies in such a situation that any part except the head or lower parts is placed next the passage, Nature cannot accomplish the delivery; and therefore, unless the position of the child be altered, the life of the woman must be generally lost.

The operation by which this is performed, is called, in the language of midwifery, *Turning*,

Turning, and confifts in bringing the feet into the paffage.

When the bad pofition of the child is difcovered before the *Waters* are drained off, the operation of turning may be had recourfe to with perfect fafety, (provided the woman be in good health), and without occafioning much pain to the patient or trouble to the practitioner. The fame caution and dexterity, however, are neceffary to fave the child in thefe cafes, as in thofe where the feet are originally in the paffage.

But when, either from reftleffnefs of the patient, or from the improper interference of the practitioner, the waters have been evacuated at an early period of the labour, the life of the child muft be generally in danger, and the woman alfo will be expofed to fome hazard.

The dangers which in fuch cafes threaten the woman and child, proceed from the womb becoming clofely contracted round the body of the infant foon after the waters are off, and from the fpongy ftate of the womb in the latter months of pregnancy,

already

already taken notice of *, which renders it eafily torn if much force is employed.

From this circumftance the child has been often pufhed through the fubftance of the womb into the cavity of the belly; and in by far the greateft number of fuch cafes the woman generally dies.

The operation of turning fhould never, therefore, be attempted by thofe who do not poffefs a perfect knowledge of the principles neceffary to accomplifh it, as otherwife much harm may be done. Indeed I have been long accuftomed to confider *Turning*, in certain cafes, as the moft difficult operation which can be performed on the human body; and hence it requires the greateft exertion of fkill. That its object is highly interefting muft be univerfally acknowledged; for the life of mother and child depend on its fuccefs.

Many women, by their improper behaviour, add much to the natural dangers attending Turning; for the temporary pain which they muft neceffarily feel, inftead of being fuffered with patience, often makes

* Page 156.

them

them unmanageably reſtleſs. On ſuch occaſions, any injury which may be done, ought with juſtice to be attributed to their own fault, and not to any error on the part of the practitioner.

It ſhould be conſidered as a duty incumbent on every woman, to ſubmit with reſignation to the management of the practitioner under whoſe care ſhe is placed, provided ſhe is ſatisfied with reſpect to his character and abilities; for an oppoſite conduct, beſides hurting herſelf, by ruffling his temper, may prevent him from operating with that calm deliberation, on which the ſafety of the child at leaſt muſt frequently depend.

SECTION III.

GENERAL OBSERVATIONS *on* PRETERNATURAL LABOURS.

IN every caſe of Preternatural Labour, it is of great importance that the paſſages ſhould be ſufficiently prepared for the de-

livery of the child, before any part of it be brought down into them, otherwiſe the life of the infant will be probably loſt.

Wherever, therefore, any unuſual part of the child is diſcovered to be next the paſſage, the utmoſt care ſhould be taken that the woman may not, by reſtleſſneſs, or the practitioner by officiouſneſs, occaſion the waters to be diſcharged at an early period of the labour.

In ſome very aukward, and fortunately uncommon poſitions of the child, it has been remarked, the life of the patient, as well as of her offspring, is expoſed to much hazard, eſpecially if this circumſtance has not been attended to. The advantage of early judicious aſſiſtance is conſequently very obvious.

Preternatural labours contradict in the moſt evident manner the ridiculous opinions of thoſe who pretend, that Nature alone may be truſted in the delivery of women; for in ſuch caſes, death would moſt generally enſue, if proper aſſiſtance were not afforded.

People,

People, ignorant of the difference of ſtructure of the human body from that of any other animated being, might be excuſed from adopting ſuch opinions, if the dangers of parturition originated from that circumſtance alone. But as the preſent mode of living, certainly prediſpoſes the body to complaints, from which it would, in a ſtate of nature, be exempt; although many of theſe dangers certainly proceed from peculiarity of ſtructure, that many alſo ariſe from that circumſtance, is a truth which muſt be apparent to the moſt ignorant and ſuperficial obſerver.

The man who, from the miſtaken and popular idea of the omnipotence of Nature in the delivery of women, ſhould be ſo blind, as to overlook the extenſive influence which the mode of life in civilized countries muſt unavoidably produce on the health of individuals, would be ſoon rouſed from his deluſive ſpeculations, if the perſon whom he holds moſt dear, ſhould, by having a preternatural labour, be injured or loſt, for want of proper aſſiſtance. With what regret muſt one in ſuch a ſi-

 tuation

tuation look back on his own ignorance and prejudice! and how little consolation would it afford him to consider, that his opinion, far from being singular, is fashionable and prevalent.

CHAPTER V.

LABOURS, WHERE THERE IS MORE THAN ONE CHILD.

WOMEN often produce two children at a birth, sometimes three, and in some very rare cases, four or five. A superficial observer might imagine, that these cases are favourable to the increase of mankind: but this by no means happens; for the woman's recovery is always more uncertain after the delivery of twins, &c. than after that of a single child; and where the number of children exceeds two, they seldom live long after birth.

It

It was formerly remarked *, that when more than one child is contained within the womb, each is included within a diſtinct bag: it ſeldom therefore happens, that the delivery of one is prevented by the interference of another, though ſuch caſes have occurred, and have been attended with conſiderable difficulty.

But Twins and Triplets do not lie in the natural poſition; for the breech of one is uſually oppoſed to the head of another: hence in theſe caſes, the labour muſt be preternatural, and conſequently in ſome degree hazardous.

The management of ſuch caſes, therefore, requires particular attention, as not only the life of the child, but alſo that of the patient, are on theſe occaſions at ſtake.

* Page 164.

SECTION I.

MEANS *by which the* EXISTENCE *of* TWINS *may be* ASCERTAINED.

IT has been very improperly believed, that when women have conceived of twins, there are certain ſymptoms before delivery, by which that circumſtance can be aſcertained. In fact, there are no ſure indications by which the exiſtence of a plurality of children can be diſcovered, till after the birth of one child. The unuſual bulk during the latter months, on which many people depend for ſuch information, is very fallacious ; and hence I have long ago experienced the truth of the obſervation of a practitioner of laſt century, that in thoſe caſes where, from the appearance of women, there is the greateſt room for ſuſpecting twins, only one child very often exiſts, while many women have a plurality of children, who exhibit before

fore delivery no marks of ſuch a circumſtance.

After the birth of one child, it is very eaſy to determine whether any other remains. This may be commonly done without having recourſe to the painful and indelicate means which are often propoſed and practiſed; for by feeling the ſtate of the belly alone, a judicious practitioner will be very ſeldom miſtaken on ſuch occaſions.

When only one child was originally contained in the womb, that organ, ſoon after delivery, diminiſhes very much in ſize, while the bowels, which were kept out of their natural ſituation in the latter months of pregnancy, immediately get forward to the forepart of the belly, and hence that part feels ſoft and yielding.

But when a ſecond child remains, the womb does not apparently diminiſh in ſize. The inteſtines, therefore, remain behind and, at the ſides, and the forepart of the belly has the ſame hardneſs as before the delivery of the firſt child.

Some circumſtance may from time to time occur, which will prevent a practitioner

tioner from aſcertaining, by this ſimple method, the exiſtence of a plurality of children; and in theſe caſes only, the other means which have been propoſed for accompliſhing the ſame purpoſe ſhould be put in practice.

SECTION II.

MANAGEMENT *in* CASES *of* TWINS.

IN caſes of plurality of children, it has already been mentioned*, the blood-veſſels of the cake of each communicate with one another. If, therefore, that part of the cord which is left attached to the after-birth be not tied, the life of the ſecond child will be expoſed to hazard: hence the cord ſhould never be left untied, both for the ſake of cleanlineſs, and to prevent the poſſibility of such an accident.

When a ſecond child is diſcovered, many practitioners proceed immediately to deliver the woman, before ſhe has recruited

* P. 164.

from

from the fatigue of bearing the firſt child: others avoid interfering, and truſt the whole buſineſs to Nature.

It muſt, however, appear inhuman in the higheſt degree, not to allow the patient the enjoyment of that relief from pain for which ſhe has ſo much occaſion, after having born one child, at leaſt till her ſtrength be ſomewhat reſtored, to enable her to undergo the neceſſary fatigue which ſhe muſt again ſuffer.

But, as has already been mentioned, there is a great probability that the poſition of the ſecond child is unfavourable; and, conſequently, if ſuch caſes were left entirely to Nature, both the patient and child might be readily loſt before proper aſſiſtance could be procured.

THE following Caſe affords a melancholy illuſtration of this remark.

CASE XIII.

IN the year —— a poor woman was delivered by a midwife of one child, on

a Thurſday morning, with apparent ſafety.

On the Tueſday afternoon following, a meſſage was ſent to my houſe, requeſting the immediate attendance of one of my private pupils. Dr Cooper, at preſent phyſician to the Duke of Gordon, viſited the woman immediately; but before his arrival, ſhe was dead.

On enquiring into the circumſtances of the caſe, the Doctor found, that a ſecond child had been left, and that labour-pains had only come on about twenty minutes before his arrival; but that a profuſe diſcharge of blood ſuddenly taking place, terminated the exiſtence of the unfortunate patient.

There is little reaſon to doubt, that if this woman had been delivered in proper time of her ſecond child, her unhappy family would not probably have been deprived of one, whoſe aſſiſtance and care were ſo intimately connected with their welfare and proſperity.

In every caſe of Twins, therefore, the ſecond child ſhould be delivered by the operation of turning, as ſoon after the patient's ſtrength is reſtored as poſſible; provided neither the head, breech, nor feet are next the paſſage, while the patient has violent forcing pains; in which caſes, the delivery may be conducted on general principles.

In all theſe caſes, it is the indiſpenſable duty of the practitioner, to ſtay conſtantly by the patient till ſhe is completely delivered; for dangerous ſymptoms may occur, which might be remedied by his aſſiſtance, and which would otherwiſe perhaps prove ſuddenly fatal.

The management in caſes where there is more than two children, is not attended with more difficulty than that of twins. On ſuch occaſions, the life of the patient is in no increaſed degree of danger; but that of the children muſt be always precarious, in proportion to their ſize, &c.

CHAPTER VI.

LABOURS COMPLICATED WITH CIRCUMSTANCES PRODUCTIVE OF DANGER TO THE CHILD OR PATIENT.

ALTHOUGH the poſition of the child may be favourable with reſpect to delivery, yet its life may be endangered from a portion of the umbilical cord falling down before it; for any degree of compreſſion, which will ſtop the courſe of the blood through that part, will, in a very ſhort time, put a period to the child's exiſtence.

THE life of the woman becomes hazardous, from the occurrence of convulſions, or exceſſive diſcharge of blood, during labour, circumſtances which fortunately do not often happen.

CASES, where the child is expoſed to danger, have, with great propriety, claimed and attracted the attention of humane practitioners, ever ſince midwifery became

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a regular art. Still, however, it is very much to be regretted, that by far the greateſt number of labours where the umbilical cord falls down, though terminated with perfect ſafety to the patient, occaſion the death of the child.

No circumſtances which can occur during delivery, are ſo truly alarming, as convulſions, or diſcharge of blood from the womb: For in the former caſe, one or two fits may prove fatal; and in the latter, the continuance of the diſcharge for a very ſhort time may be followed with the ſame unfortunate effect.

SECTION I.

LABOURS *where the* LIFE *of the* CHILD *is* EXPOSED *to* DANGER.

A Portion of the umbilical cord may be forced down, either naturally, or in conſequence of miſmanagement. In the former caſe, it will be found through the membranes at the beginning of labour; in

in the latter, it only comes down, after the waters are drained off.

The cord can fall down naturally only where it is uncommonly long, or where the child lies in a crofs pofition, and therefore fuch cafes occur very feldom.

But when the waters are evacuated before the paffages be properly prepared for allowing the delivery of the child, the cord will be generally forced down before, or along with the prefenting part.

When the cord is felt originally through the membranes, the patient fhould be kept very quiet, and in one pofture, till the circumftances preparatory to delivery are completely accomplifhed; when the practitioner, by turning the child, may probably be able to fave its life.

But when the early difcharge of the waters has occafioned the protrufion of the cord, it will not be often in the power of a practitioner to obviate the threatening danger, without expofing the life of the patient to much hazard.

As, therefore, this accident cannot be frequently remedied, it muft be an important object to prevent its occurrence. By

By proper attention, this can be generally accomplished; for the premature discharge of the waters must be either the fault of the practitioner or patient, and may consequently be commonly prevented.

The great advantages, therefore, of quietness at the beginning of labour, on the part of the patient, and of guarded caution on that of the practitioner, must be very obvious. From what has already been said on this subject *, it will probably appear, that from neglect of these necessary rules, many deliveries, which would otherwise be strictly favourable, are rendered painful to the patient, and dangerous to the child.

SECTION II.

LABOURS *attended with* CONVULSIONS.

THE precautions by which convulsions during labour may in many cases be prevented, have already been mentioned †;

* Page 277. † Page 214.

and

and the dangers to which pregnant women are expoſed, when attacked with this frightful diſeaſe, have alſo been pointed out.

When convulſions occur in the time of labour, the ſafety of the woman commonly depends on expeditious delivery; and therefore the proper means for accompliſhing ſo important an object muſt be employed without delay.

The treatment on ſuch occaſions ſhould be entruſted to a ſkilful practitioner alone; and therefore directions for that purpoſe are inconſiſtent with the nature of this work.

But as in many caſes, it may be in the power of the ordinary attendants to ſtop the threatening fit by ſimple remedies, it is of importance to explain ſuch means.

When, during labour, the patient complains of a very ſevere pain in the head or ſtomach, along with dimneſs of ſight, or the ſenſation of flaſhing of fire before the eyes, with fluſhed face, if ſhe be of a ſtrong full habit, or if ſhe has not been much weakened from previous diſeaſe, blood ſhould immediately be drawn from the

the arm, and a free current of air admitted into the room.

If, notwithſtanding theſe means, the threatening fit ſhould come on, a cork ought to be put between the jaws, otherwiſe the tongue may be very much injured.

Sometimes in ſuch caſes the ſtomach is diſordered, and increaſes the tendency to convulſions. Wherever that is diſcovered, the patient ſhould be made to drink an infuſion of Chamomile-flowers, or Columbo; which, by emptying the ſtomach, may on ſome occaſions prevent a return of the fit, or moderate its violence.

It muſt not, however, be concealed, that when convulſions occur during child-bearing, the woman cannot be pronounced to be out of danger till after delivery, as has already been obſerved.

SECTION III.

LABOURS *attended with a* DISCHARGE *of* BLOOD *from the* WOMB.

IN a former part of this work*, the dangers which reſult from a diſcharge of blood in the latter months of pregnancy were pointed out, and the circumſtances by which that accident may happen were explained.

When ſuch a diſcharge occurs during labour, it muſt depend either on an accidental ſeparation of the whole, or more commonly a part of the after-birth, or on the unuſual place of attachment of that ſubſtance. The patient's life will be expoſed to greater hazard from the latter than the former of theſe cauſes.

When the diſcharge is trifling, and does not originate from the ſituation of the cake,

* Page 216.

no apprehenſion ſhould be entertained; but the practitioner ought to ſtay conſtantly by the patient, to be ready to interfere, in the event of the diſcharge becoming profuſe. In ſuch caſes, the woman ſhould be kept very cool; the bed-clothes ought to be few; the room muſt not be crowded, and the drinks ſhould be quite cold. Every thing which is heating, being highly pernicious, cannot be too ſtrictly prohibited.

If the diſcharge be conſiderable, or ſo long continued that the patient's ſtrength is much impaired, her ſafety will depend on immediate delivery, which muſt therefore be accompliſhed on general principles. A few minutes delay on ſuch occaſions may prove fatal to mother and child.

When the after-birth is unfortunately attached to the neck or orifice of the womb, the utmoſt danger is to be dreaded; for the patient's life muſt in almoſt every caſe of that kind depend on the judgement, courage, and dexterity of the practitioner.

SECTION IV.

CONSEQUENCES *of the* RETENTION *of the* AFTER-BIRTH.

THE after-birth can be retained above two or three hours, only in conſequence of a particular diſeaſed ſtate, which cannot be explained in this work, or from the womb having contracted ſo irregularly, that the mouth becomes quite cloſed up. In the former caſe, a portion of it is generally diſengaged, and hence a diſcharge of blood will be occaſioned. In the latter, unleſs proper means be adopted for extracting it, the cake will in a ſhort time become putrid.

Either of theſe circumſtances muſt be attended with danger to the patient; for if a diſcharge of blood occurs, it cannot be ſtopped till the womb be emptied of its contents; and if the after-birth in a putrid

trid ſtate be retained for two or three days, a very bad fever will be induced.

Whenever a conſiderable diſcharge takes place after delivery, the attendants are generally with reaſon alarmed, and therefore there is not much hazard that the caſe can be miſtaken or miſmanaged. But when no diſcharge appears, it too often happens, that the patient is unwilling to allow the practitioner to interfere; the attendants think it cruel to diſturb her; and even many practitioners, from timidity or averſion to give pain, avoid endeavouring to aſſiſt in proper time. Many melancholy caſes have originated from ſuch cauſes; the following, which I have ſelected from a great many, may alone be neceſſary to prove the truth of this remark.

CASE XIV.

A Lady was delivered of her firſt child in the year ——, without any extraordinary aſſiſtance; but in the attempts to bring away the after-birth, the cord was torn

torn away; ſoon after which, a diſcharge of blood took place.

A male practitioner was then ſent for; but his firſt efforts were inſufficient to accompliſh the delivery of the cake, and he was deterred from repeating them, by the languid ſtate of the patient, and becauſe every attempt which he made to aſſiſt, brought on faintings.

The Lady continued very weak till the ſixth day after delivery, when ſhe was ſeized with violent ſhiverings; along with which, a very putrid diſcharge from the paſſage of the womb occurred. The relations of the patient then inſiſted on my being called.

Notwithſtanding every means which could be ſuggeſted, the unfortunate Lady diednext day.

It muſt therefore be obvious, that as the life of the patient is never exempt from danger till the after-birth is extracted, no practitioner ought on any pretence to leave

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a woman for even a ſhort ſpace of time, till that circumſtance has taken place.

After the cake has been retained for ſeveral hours, it may in general be brought away by a perſeverance in making the neceſſary efforts for that purpoſe. The patient, it muſt be confeſſed, will be unavoidably expoſed to a little pain; but temporary ſufferings can never be put in competition with the hazards to which ſhe would be otherwiſe expoſed.

When the after-birth, from a diſeaſed ſtate, adheres ſo firmly to the womb, that it cannot be entirely extracted; a few days after the diſengaged portion is excluded, tepid water ſhould be from time to time thrown into the paſſage of the womb by the common means, and a tea-ſpoonful of the Peruvian bark ſhould be given twice or thrice a-day. This management muſt be continued till the retained portion is diſcharged.

PART

MANAGEMENT

OF

FEMALE COMPLAINTS.

PART III.

CHAPTER I.

TREATMENT OF WOMEN AFTER DELIVERY.

WHEN women have enjoyed good health previous to pregnancy, and when their labour has not been attended with any uncommon circumſtance, their recovery after delivery cannot be precarious, except from inattention to thoſe precautions which the peculiar ſtate of their ſyſtem at that time renders neceſſary.

In this chapter, theſe precautions are pointed out; and in the two ſubſequent ones, the complaints incident to the child-bed ſtate, are explained.

SECTION I.

State *of* Women *after* Delivery.

THE effects of labour may with propriety be termed general and particular; the former are thoſe which originate from fatigue; the latter ariſe from the peculiar ſtate of the body before and after delivery.

Even in the moſt favourable caſes, women muſt be very much fatigued by the exertions which are neceſſary to expel the child. The violent contractions of the womb, and aſſiſting powers, encreaſe the action of the heart and blood-veſſels, and the reſiſtance which is oppoſed by the particular form of the child, &c. occaſions a conſiderable degree of pain; hence a temporary fever is induced. The old maxim, that

that a woman, after delivery, ſhould be conſidered as a perſon much bruiſed, is therefore founded on reaſon.

The diſeaſes incident to the childbed ſtate, however, depend more on the particular, than on the general effects of labour. Theſe, therefore, merit much attention.

In the latter months of pregnancy, the womb occupies ſo large a ſpace of the cavity of the belly, that the ſtomach and inteſtines are greatly compreſſed, and the circulation of the blood is impeded through the neighbouring veſſels.

During labour, the action of the midriff, the fleſhy parts of the belly, and the womb, muſt compreſs all theſe parts in an increaſed degree, while the paſſage of the child through parts naturally ſmall, occaſions a temporary uneaſineſs.

After delivery, the preſſure is ſuddenly taken off from all the parts within the belly by the diminution in ſize of the womb, and the blood is allowed to paſs through them more freely. But from the previous long-continued preſſure, the power of the

blood-veſſels is much impaired; hence they are not capable of reſiſting an overflow of blood, nor of puſhing forward their contents with their uſual force, conſequently the blood is apt to become accumulated, and may very readily over-diſtend the veſſels, if the increaſed action of the heart continues.

The womb ſuffers great changes after the excluſion of the child and ſecundines; for it contracts into a comparatively ſmall ſize, its ſides approach to each other, and become in contact. The orifices of its blood-veſſels are large and open; and for a certain time, though its ſize be diminiſhed, its weight continues the ſame. For three, four, or five days, a red-coloured diſcharge proceeds from theſe veſſels, called the *Lochial Diſcharge*; in common language, the *Cleanſings*. This evacuation gradually changes to a dark colour, then becomes ſerous, and diſappears entirely at different periods in different women, and according to various circumſtances, depending on conſtitution, &c. It ceaſes ſooner in nurſes than in others.

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The ſtate of mind, having conſiderable influence on lying-in women, ſhould not be overlooked.

Almoſt all women, as has been already mentioned *, are impreſſed with gloomy ideas at the beginning of labour; and the pain which they ſuffer during its progreſs, tends generally to increaſe their apprehenſions. But a very oppoſite diſpoſition commonly prevails after delivery. The joy ariſing from having become a mother, along with the relief from all immediate pain, is ſometimes ſuch, that the moſt violent tranſports are occaſioned.

In ſuch a ſtate of mind, the precautions which are neceſſary to reſtore that regularity in the organs ſubſervient to life, which was interrupted by the force of the labour-pains, are apt to be entirely overlooked. The temporary ſtrength, which is acquired by the joyful emotions, encourages the patient to indulge in talking; and theſe exertions, together with the previous fatigue, which ſhe muſt have un-

* Page 246.

dergone,

dergone, contribute to exhauſt her very much.

When the body is in any conſiderable degree weakened, the actions of the ſentient principle commonly become alſo impaired; hence a few hours after delivery, women generally are unable to bear thoſe circumſtances which formerly never affected them. They are ſuſceptible of the moſt trifling impreſſions, are eaſily fluttered or diſconcerted, and ſuffer the moſt immoderate ſenſations of pleaſure or grief from apparently inſignificant cauſes.

As every violent paſſion of the mind is accompanied with a correſponding effect on the corporeal ſyſtem, it muſt be very evident, that in the ſtate of the body after lying-in, the worſt conſequences may be dreaded from any violent agitation.

Although what has been thus deſcribed is the ordinary diſpoſition of mind in lying-in women, yet very oppoſite ſenſations are felt by ſome; for many are impreſſed with the idea, that though they have eſcaped the dangers of child-bearing, they

they cannot recover from thoſe complaints which ſucceed delivery.

This idea prevails principally among women who have had ſeveral children; a circumſtance which, to a ſuperficial obſerver, might appear unaccountable; as the experience which they have had, it may be ſuppoſed, ſhould teach thoſe women, that under proper management, their recovery is almoſt certain, if not previouſly diſeaſed.

But when this matter is more ſtrictly inveſtigated, the apprehenſions of theſe women will ſeem more natural, though equally ill-founded. For the pleaſure of being a mother, after bearing ſeveral children, by loſing its novelty, or having been already gratified, is not ſo ſenſibly experienced as at firſt; therefore the real pains which ſucceed labour are completely felt; and hence the ſame train of ideas is excited, as is induced when painful ſenſations are occaſioned.

Indulgence in the depreſſing paſſions is always attended with bad effects; conſequently in the treatment of lying-in women, it ought to be an object of mate-

rial

rial importance, to guard againſt theſe with the utmoſt care.

SECTION II.

REGULATIONS *reſpecting the* DRESS, AIR, *and* EXERCISE, *proper for* LYING-IN WOMEN.

IT was formerly the cuſtom to apply very ſtrait compreſſes to the belly, with a view to prevent it from continuing bulky after delivery. But this treatment has generally the oppoſite effect, as may be obſerved in thoſe in low life, who ſtill continue it. Some degree of compreſſion is neceſſary and beneficial; and that can be obtained by the application of a table-napkin pined moderately firm.

The bed-linen, and alſo the body and head-dreſs of lying-in women ſhould be frequently changed, otherwiſe the ſmell which will be occaſioned will ſufficiently indicate the dangers which muſt ariſe from ſtagnant animal effluvia. The bed-clothes and

and dreſs of women on ſuch occaſions ſhould be light, in order to prevent exceſſive perſpiration, to which they have a natural tendency, but which is always productive of bad conſequences.

It may perhaps be unneceſſary to remark, that patients, during lying-in, ſhould always be kept as free from moiſture as poſſible.

THE bad effects of confined or impure air, are now almoſt univerſally known; conſequently the propriety and neceſſity of having the bed-curtains always open, of preventing many viſitors from crowding the room, of removing as ſpeedily as poſſible every thing which can contaminate the air, and of admitting occaſionally the freſh air, by opening the windows and doors, muſt be very obvious.

WOMEN were formerly obliged to remain in bed for a certain number of days after delivery, by which they were much weakened and fatigued. In modern times, the practice has paſſed from one extreme to another; for at preſent, it is faſhionable

for them to riſe a very ſhort time after parturition.

This circumſtance ſhould ſurely be regulated according to the ſtrength of the patient; hence no invariable rule can be eſtabliſhed. When the woman feels that ſhe can eaſily undergo the fatigue of riſing, which, in ordinary caſes, happens about the fourth or fifth day, ſhe ought to be taken out of bed, that it may be properly adjuſted. On ſuch occaſions, women commonly *ſit upright*, by which they ſuffer conſiderable uneaſineſs; and at the ſame time, by the bulky womb, (for that organ does not reſume its natural ſtate till two or three weeks after delivery), preſſing forcibly on the ſoft parts at the bottom of the baſon, the foundation for a very troubleſome, uncomfortable, and diſagreeable complaint, already explained in the firſt part of this work *, muſt unavoidably be laid.

Women ought therefore to be placed in a poſition half-ſitting and half-lying, as long as the womb continues enlarged, by

* P. 113.

which means theſe inconveniencies will be avoided.

For the ſame reaſons, walking even from one room to another, at leaſt as long as the Lochial diſcharge continues, is highly improper. Many women boaſt, that they have been able to go through the whole houſe eight or ten days after delivery; but they often find in a ſubſequent period of life, by the complaints which they ſuffer, that they had little cauſe to be ſatisfied with their own prudence, or the attention of the practitioner who indulged them with ſuch liberties.

Confinement to one room for two or three weeks, eſpecially in warm weather, may certainly be deemed improper, and therefore women may very ſafely, if well in other reſpects, be allowed to occupy the drawing-room through the day after the ſecond week; but they ought for at leaſt a certain time to be carried thither, and to be placed in a reclining poſture on a ſofa.

After the fourth week, in ſome caſes ſooner, the patient may be permitted to go abroad. The common practice on this oc-

caſion, of going firſt to church, cannot be reprobated in ſtrong enough terms. It muſt be confeſſed, that the wiſh of returning thanks to the Author of our exiſtence, for having preſerved her life amidſt the pains which ſhe ſuffered, ought to be impreſſed on the mind of every pious woman. But the duty which ſhe muſt naturally owe her family, ſhould induce her not to expoſe herſelf to the hazard of having her perfect recovery interrupted; and hence till that is eſtabliſhed, ſhe ought to avoid all crowded places, where, from the heat, impure air, long confinement, &c. ſhe might be injured.

Women, on going abroad, ſhould therefore at firſt take an airing in a carriage for two or three days, then walk a little when the weather is favourable, and defer going to church till they feel themſelves in the natural ſtate of good health.

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SECTION III.

REGULATIONS *reſpecting the* DIET *of* LYING-IN WOMEN.

SOME degree of languor or faintneſs generally occurs immediately or ſoon after delivery, and is the natural conſequence of the fatigue from the exertions during labour. It has been long cuſtomary on ſuch occaſions, to give the patient ſomething ſtimulating, by way of cordial, ſuch as ſtrong ſpirits or drinks with wine and ſpices, &c.

When the great ſenſibility of the ſtomach, from its numerous nerves, already deſcribed *, and the extenſive influence which it has over the whole body, are attentively conſidered, the impropriety of exhibiting ſtimulating ſubſtances in the irritable ſtate of the patient after delivery,

* Introduction, p. 66.

will

will be very ſtriking. If it is evident, by the fluſhing of the face, &c. that a glaſs of ſpirits, even in women in health, increaſes the velocity of the blood, it muſt be obvious that more violent effects will be produced by the ſame cauſe, when the body is weakened and irritable.

When, from exceſſive languor, ſome cordial is neceſſary, a little cold Barley-cinnamon water, a piece of Sugar-biſcuit or of bread ſoaked in wine, alone ſhould be allowed, except on extraordinary occaſions, when a ſmall proportion of warm Negus may be given, or a piece of Sugar dipped in brandy.

For a few days after delivery, women are generally very thirſty; and provided the drinks be not heating, (except they do not propoſe to nurſe), their deſires may be ſafely gratified. Gruel, with ſometimes a very ſmall proportion of Wine, Toaſt and Water, Cow-milk Whey, Lemonade, Tamarind and Apple Tea, &c. are the moſt proper drinks. In ſummer, theſe may be taken quite cold; but in winter, it is always expected that they ſhould be ſomewhat warm.

After the third or fourth day of lying-in, if the patient's ſtrength requires it, ſhe may be indulged with two or three glaſſes of Claret during the day, or the ſame quantity of equal parts of Port wine and water. And after the tenth or twelfth day, if ſhe gives ſuck, ſhe may alſo be allowed a beer-glaſs full of Porter or mild Ale after dinner and ſupper.

Many errors are committed by practitioners in the regulation of the food of lying-in women. All groſs meats which might overload the ſtomach, or by heating the woman, prove a cauſe of fever, ſhould certainly be ſtrictly prohibited. But every patient, after child-bearing, ought not to be half-ſtarved, as ſome recommend. Beef-tea, Veal or Chicken broth, may be taken for dinner, for the firſt two or three days; but if the woman has been accuſtomed to a full rich diet, or if ſoups diſagree with her, ſhe may have ſomething ſolid, as boiled fowl or chicken, white fiſh, or light pudding, from the beginning.

Proper regard in this reſpect ſhould be paid to her habit, former manner of living,

ving, and preſent ſtate, Too great indulgence, it muſt always be remembered, is more to be dreaded than too much abſtinence, though both extremes ſhould be equally avoided.

SECTION IV.

REGULATIONS *of the* MIND *of* LYING-IN WOMEN.

FROM the view which has been given of the ſtate of the mind after delivery, it will be obvious that every circumſtance which tends to excite even the moſt trifling emotions when in health, ſhould be cautiouſly guarded againſt during lying-in. For this reaſon, all the common and well known means to prevent noiſe from being heard, ſhould be employed.

It ſometimes becomes neceſſary, from the ſituation of the bed-room, &c. to ſtuff the patient's ears with cotton; but this ſhould be had recourſe to only in very urgent

gent caſes; for the mind in ſuch a ſituation is always kept in a ſtate of anxiety, from the wiſh the woman has to underſtand what is going on among the attendants, and from the apprehenſions which ſhe may be led to entertain, if ſhe is not indulged.

All viſitors for the firſt ten or fifteen days ought to be denied acceſs; for beſides the hazard of their mentioning ſome piece of news, which may hurt the patient, the fatigue of talking, &c. might be productive of the moſt ſerious conſequences. A prudent cautious friend, however, ſhould be allowed to ſit by the woman, and ſhe ought to be enjoined to give an agreeable turn to her ideas, while ſhe prevents her from too great exertions, and permits her to reſt, when ſhe ſeems to have an inclination for it.

The common practice of making the nurſe to ſit all night by the patient, is always attended with much inconvenience, and is often the cauſe of many complaints. The experience of every lady who has adopted this practice, will confirm the obſervation; for the nurſe muſt either con-

tinue awake, or fall aſleep. In the former caſe, ſhe will endeavour to ſhew her attention, by tormenting the patient with offers of meat or drink; and in the latter, by the noiſe which ſhe may make while aſleep, ſhe will diſturb the woman.

The nurſe, therefore, (except on extraordinary occaſions), ought to ſleep in a bed next the room of the patient, ſo that ſhe may be ready to aſſiſt on every neceſſary occaſion.

The noiſe which children make during the operation of waſhing, dreſſing, &c. muſt certainly prove highly diſagreeable to every mother; hence children ſhould never be dreſſed in the room of the woman, till her ſtrength is completely reſtored.

SECTION V.

MANAGEMENT *of the* BREASTS.

WHEN the woman propoſes to give ſuck, the child ſhould be put to her breaſt as ſoon after delivery as her ſtrength will permit, and the breaſts ſhould be previouſly gently waſhed with a little warm milk and water, in order to remove the bitter viſcid ſubſtance, which is furniſhed round the nipple, to defend theſe parts from excoriations.

When the woman has never nurſed before, the nipples at firſt are ſometimes not ſufficiently prominent to afford a proper hold for the child. In ſuch caſes, it has been long cuſtomary to have the breaſts drawn, as it is termed, either by an adult, an old child, or even by the young of ſome of the brute ſpecies, as a whelp. In general, however, the degree of violence uſed on theſe occaſions, is always produc-

tive of confiderable injury, and therefore more gentle means ought to be employed.

For this purpofe, the breafts fhould be fomented by flannels dipped in warm water, and then a glafs or ivory cup, mounted on a bag of Elaftic gum, ought to be applied in fuch a manner to the nipple, that it will draw it out gently and gradually, while, by moderate preffure on the fides of the breaft with the hands, the milk will be pufhed forward.

Another inftrument has lately been introduced into practice, which poffeffing more power, ought to be ufed with much caution; it confifts of a glafs-cup, adapted to receive the nipple; to which is added, an air-fyringe, with a valve; by working this, the nipple may be drawn out with as great a degree of force as the operator may find neceffary. This inftrument fhould never be employed by unfkilful people, otherwife it may injure the breaft.

After this operation has been repeated two or three times, the child, except in extraordinary

extraordinary cafes, will find no difficulty in fucking.

At firft, the patient fhould not be fatigued by the long-continued or frequent application of the child; and when it is applied, fhe ought to be gently fupported by pillows in bed, in a reclining pofture, and every precaution muft be ufed to guard againft cold.

When the patient does not mean to give fuck, every circumftance which can contribute to the fecretion of milk fhould be carefully avoided. Great abftinence fhould therefore be enjoined; as little drink as poffible taken, and ripe acid fruits, as Apples, Strawberries, &c. ought to be ufed, which will affuage thirft; and by proving laxative, will affift to carry off the milk, and prevent its fecretion.

The breafts commonly are greatly diftended for the firft two or three days; and in many cafes, a confiderable degree of pain, with fometimes a violent fever, are occafioned. Thefe fymptoms, however, are of fhort duration; for they generally terminate after twenty-four or thirty-fix hours, by a profufe four-fmelling fweat, a gentle

loofenefs,

loofenefs, or a copious difcharge of milk from the breaft.

Many practices have been adopted, with a view of preventing thefe painful fenfations, (termed the Milk-fever); but they are more often productive of bad than of beneficial effects.

The beft management appears to confift in gently rubbing the breafts, if they are much diftended, with warm olive-oil, evening and morning, and covering them with flannel; a practice which fhould be begun fome time before delivery, whenever the milk is to be difcouraged.

If the milk feems to be partially difcharged from the breafts, the parts muft be kept always dry, and the cup mounted on Elaftic gum, may be ufed as already directed.

When women fuffer no uneafinefs from the diftenfion of the breafts, it would be abfurd to have them drawn, either by natural or artificial means; for fuch practices often occafion inflammation, with its painful confequences.

One or two dofes of any cooling laxative will affift materially the expulfion of the

the milk, and ought not in ſuch caſes to be neglected.

SECTION VI.

MEDICINES *neceſſary during* LYING-IN.

IN ſome countries, it is cuſtomary to preſcribe a great many different medicines for ſeveral days after delivery; but in general, ſuch practices occaſion, inſtead of preventing, many diſagreeable complaints, and therefore ought to be exploded.

All the temporary pains which the patient feels in conſequence of labour, are more readily removed by reſt, than by any other means; hence that appears to be the circumſtance which requires the principal attention. Where opium does not diſagree with the patient, ſhe ſhould be given thirty drops of Laudanum, or a grain Opium pill, immediately after delivery. But where theſe cannot be preſcribed from peculiarity

culiarity of conſtitution, twenty or twenty-five grains of fine freſh powdered Ruſſian Caſtor may be ſubſtituted in their ſtead, with the ſame good effects.

The calm refreſhing ſleep, to which the patient has a natural tendency after the fatigue of delivery, aſſiſted by theſe means, will contribute much more to take off the ſoreneſs of the throat and breaſt, which is generally felt after labour, than any medicine which the ſhops can furniſh.

But if the patient has been accuſtomed to take many medicines, or if ſhe has great confidence in their powers, ſhe ſhould be allowed ſomething ſimple; which not poſſeſſing any active qualities, cannot hurt her, while her expectation of its ſuppoſed good effects, will make her fancy them really accompliſhed: an emulſion of Almonds will be found to anſwer this purpoſe very well *.

The opiates ſhould be continued for ſeveral nights, till the woman can reſt without them, and till the after pains, to which many are ſubject, have entirely ſubſided.

* See Forms of Medicine at the end of this Work.

Many troublesome and painful complaints will unavoidably occur, if proper attention be not paid to the state of the belly during lying-in. In the evening of the second, or on the third day after delivery, a gentle laxative should be exhibited, if the patient has not had natural passage; and the same ought to be repeated every second day, if necessary.

Some of the common laxative medicines are improper in the child-bed state, from the sickness, pain in the belly, or fatigue, which they induce, and therefore great caution is required in the choice of such medicines. Two tea-spoonsful of Calcined Magnesia, or a dose of the Laxative Electuary, described in the forms of medicine at the end of this work, appear to me preferable to any other.

When the patient has not the common prejudice, which prevails in Great Britain, against the use of *Lavemens*, these consisting of the most simple materials, as warm water, with a little fine olive-oil, and two tea-spoonsful of salt, should be used occasionally for the first few days after delivery, instead of laxative medicines; as the effects

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of theſe latter, in the irritable ſtate of the woman's ſtomach at that time, muſt be always ſomewhat uncertain.

CHAPTER II.

COMPLAINTS WHICH OCCUR AFTER DELIVERY.

FROM the view which has been exhibited of the ſituation of women during and after labour, it will appear evident, that under certain circumſtances, many complaints muſt occur after delivery.

Some of theſe, though productive of much uneaſineſs, and apparently formidable, are attended with no danger, and yield to the moſt ſimple treatment; others, on their firſt approach inſignificant and trifling in the opinion of ſuperficial obſervers, ſuddenly terminate in the moſt alarming ſymptoms.

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The former of theſe claſſes of diſorders forms the ſubject of the preſent, and the nature of the latter is explained in the ſubſequent chapter.

SECTION I.

INJURIES *in conſequence of* DELIVERY.

FROM the bruiſes occaſioned by the paſſage of the child through parts which are very delicate, and eaſily injured, women are often ſubject to *ſwellings* externally, even in the moſt ordinary caſes.

Theſe in general ſubſide ſoon after delivery, and require no particular management; but wherever, from the ſenſation of throbbing pain, and great heat, there is reaſon to dread inflammation with its conſequences, the moſt active means muſt be employed, to prevent the threatening evil.

Theſe parts ſeem to have a great tendency to ſuppuration; and therefore too

much caution cannot be recommended to avoid injuring them by officious interference during labour; nor too much attention cannot be paid to prevent the bad consequences of inflammation, when it has been by any cause induced.

WOMEN are sometimes torn, by their delivery having been hurried on before the passages were properly prepared. When these injuries are slight, nothing more seems necessary, than to keep the parts clean and dry; but when they are considerable, they sometimes baffle every exertion of art, and prove the cause of the most uncomfortable state to which women can be reduced.

AFTER difficult or tedious labours, the patient is in many cases rendered incapable of retaining her water, consequently she is kept in a very disagreeable situation. This complaint, on some occasions, continues for a few days only; and in other cases it remains for many weeks.

When no injury has been done, either by the improper use of mechanical expedients,

dients, or by the long-continued preſſure of the child on parts naturally of a delicate ſtructure, by proper attention, this very troubleſome diſeaſe may be eaſily removed.

The uſe of the cold bath, as ſoon as the woman can bear it, or the application of cloths dipped in cold water and vinegar, in the moſt ſimple caſes, will effect that purpoſe. But where the complaint is more obſtinate, beſides the uſe of internal ſtrengthening remedies, a bliſter ſhould be applied to the under part of the backbone.

When this diſeaſe proceeds from any cauſe which can occaſion a loſs of ſubſtance in theſe parts, the cure has been hitherto almoſt entirely left to nature; or in other words, the patient has been allowed to ſuffer the diſagreeable ſenſations attending ſuch a ſtate, without any attempts being made to alleviate them.

From my own practice in theſe caſes, I have reaſon to believe, that it is very often in the power of a ſkilful practitioner, at leaſt to palliate the troubleſome ſymptoms,

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an object which ought always to be aimed at.

SECTION II.

FAINTINGS *after* DELIVERY.

THE languid ſtate in which many women are immediately after delivery, is ſometimes ſucceeded by *Faintings*. If there has been no injury done during labour, and if the pulſe and breathing be diſtinct and regular, little hazard is to be dreaded. On ſuch occaſions, the complaint may be attributed to the peculiar ſtate of the body and mind of the patient at that time.

Theſe faintings are readily removed by the exhibition of any ſimple cordial, by keeping up a free circulation of air in the room, and by gentle preſſure, (by means of a ſoft warm compreſs), on the belly.

But when the faintings ſucceed any violent injury of the paſſages through which the

the child proceeds, or a profuſe diſcharge of blood, or when they are attended with quick irregular pulſe and cold extremities, the greateſt danger is to be apprehended.

Recourſe muſt then be immediately had to the advice of a ſkilful practitioner; and till that can be procured, the patient ſhould be ſupported with light nouriſhment, and gentle cordials, if ſhe can ſwallow; warm flannels ought to be applied to the ſtomach and belly; and bottles or bladders filled with warm water ſhould be put to her feet.

In theſe caſes, it is very common for the attendants to endeavonr to rouſe the patient, by the application of various ſubſtances to the noſe, as ſmelling ſalts, hartſhorn, ſpirits, &c. But ſuch practices are very improper; for when the patient is in a languid irritable ſtate, any ſtimulating medicine, raſhly ſnuffed up, might endanger ſuffocation; or by exciting violent coughing or ſneezing, would induce exceſſive flooding; which, in a few hours, might prove fatal.

When

When the faintings are accompanied with exceſſive diſcharge of blood, the patient ſhould be expoſed freely to the air, by opening the windows and doors of the room; cloths dipped in cold water ſhould be conſtantly kept applied to the bottom of the belly; and in ſhort, every means ſhould be employed which can retard the circulation of the blood, and aſſiſt the contraction of the womb.

After the diſcharge, by a proper perſeverance in theſe means, has been ſtopped or moderated, the patient muſt be kept very quiet, her drinks ſhould be perfectly cold, and the room ought not to be heated, otherwiſe a return of the complaint may be dreaded.

SECTION III.

AFTER-PAINS.

FOR ſome time after delivery, the contractions of the womb frequently continue, and occaſion pains, which in ſome caſes are ſo violent, as to reſemble the throes of labour. This complaint, which is termed *After-pains*, tho' productive of conſiderable uneaſineſs, is never to be conſidered as dangerous; and even in the moſt urgent caſes, the ſufferings of the patient from this cauſe, are merely temporary.

After-pains are occaſioned by clots of blood being formed in the cavity of the womb, and exciting contractions in that organ, by which they are expelled. They occur more ſeldom in firſt than in ſubſequent pregnancies; a circumſtance which probably proceeds from the womb not contracting ſo readily and uniformly after ſeveral deliveries as at firſt.

As ſeveral other complaints may be miſtaken for After-pains, by which the proper opportunity for endeavouring to prevent their progreſs may be loſt, the circumſtances which diſtinguiſh After-pains from every other diſeaſe, ought to be univerſally underſtood.

When the pains are alternated with intervals of eaſe, when the breathing is not impeded, and when every pain is ſucceeded by the expulſion of coagulated blood, even although a degree of ſickneſs and fever attends, the complaint may be conſidered to be After-pains. But if the pain be conſtant, or if it ſhifts its ſituation, ſome other diſorder ſhould be ſuſpected.

The uneaſy ſymptoms of this complaint may be palliated by the application of warm flannel to the belly, or by fomentations with bladders, half-filled with warm water, and by opiates, (as thirty-five drops of Laudanum), repeated every eight or ten hours. The belly ſhould alſo be kept open by ſimple *Lavemens.*

When cholic or wind in the bowels are complicated with After-pains, Aſafœtida or Laudanum

Laudanum may be added to the *Lavement*. In proportion as the red colour of the Cleanſings diminiſhes, the After-pains abate.

SECTION IV.

IRREGULARITIES *of the* LOCHIAL DISCHARGE.

THE nature of the Lochial diſcharge has been already explained *; but its appearance and duration vary ſo much in different women, and in the ſame woman on different occaſions, that they cannot be accurately aſcertained nor deſcribed.

The quantity of blood which was ſent to the womb during the latter months of pregnancy, cannot be ſuddenly diminiſhed, otherwiſe many complaints would be induced; hence this diſcharge for two or three days after delivery, has almoſt the appearance of pure blood, and furniſhes an

* Page 324.

an excellent means for carrying off the overload from the ſyſtem.

By degrees, however, the ſize of the blood-veſſels becomes diminiſhed, their extremities contract, the thinner part of their contents is alone expelled; and at laſt, the evacuation ceaſes entirely.

In ſome caſes, this regular ſucceſſion does not take place; for the red colour of the diſcharge ſometimes diſappears, and recurs now and then, till the womb be reduced to its original ſize, and has again acquired its former ſtructure.

The Cleanſings in ſome women are very abundant, eſpecially, as already hinted, in thoſe who do not nurſe; in others, they are in ſmall quantity; and yet, in general, neither of theſe circumſtances ſeems to have much effect on the health of the patient, unleſs they occur in the extreme; in which caſe, when too profuſe, all the complaints originating from weakneſs will be occaſioned; and when too ſcanty, if no other diſcharge be increaſed, all the conſeſequences of too great fulneſs will be felt.

When

When the Lochial Evacuation continues beyond the ordinary time, or is exceſſive, and ſeems to weaken the woman, it proceeds either from injuries done during delivery, or from a previous diſeaſed ſtate of the body.

Although in ſuch caſes the treatment muſt be varied according to the cauſe, and conſequently a variety of management will often be neceſſary; yet in general, by doſes of Peruvian Bark, either in the form of powder, or of decoction*, along with the Elixir of Vitriol, the diſcharge may be moderated, and the ſtrength of the patient ſupported.

When this complaint does not yield to ſuch ſimple remedies, the advice of an experienced practitioner ought to be had recourſe to, that means may be adopted for preventing the train of Nervous diſorders, which commonly ſucceeds profuſe evacuations.

Deficient cleanſings are more often the effect than the cauſe of other complaints, and therefore will be remedied by the re-

* See Forms of Medicine, already referred to.

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moval of the diſorder from which they originate. It cannot, however, be denied, that obſtruction of that diſcharge may be occaſioned by ſudden expoſure to cold, or by irregularities in management, and is then an original diſeaſe. This may be diſtinguiſhed from the former complaint, by the violent ſymptoms of fever which attend, and by the hiſtory of the previous ſtate of the patient.

In theſe caſes, the return of the evacuation will be promoted by the application of warm fomentations to the belly, by the uſe of warm diluent drinks in ſmall quantities often repeated, as Gruel with a little wine, White-wine whey, &c.

When the ſymptoms of fever are alarming, doſes of Saline Julep, with the addition of four or five drops of Antimonial Wine, every two or three hours, or three or four grains of genuine James's Powder, repeated at the diſtance of ſeven or eight hours, afford the beſt means of relief.

THE importance of *Cleanlineſs*, as long as the Lochial diſcharge continues, does not require

require being pointed out; but when the evacuation has a bad ſmell, common attention in that reſpect is not alone ſufficient; for unleſs the moſt ſcrupulous regard be paid to prevent its ſtagnation in the paſſage of the womb, excoriations or inflammation, with all its formidable conſequences, will enſue. The Nurſe muſt on ſuch occaſions be directed to waſh that organ twice or thrice a-day with Warm Water, to which a very little Port Wine may be added, by means of a proper apparatus.

SECTION V.

DISEASES *of the* BREASTS.

THE ſtructure of the Breaſts, already explained*, renders them the frequent ſeat of diſeaſe. Some of the diſorders to which they are liable, can be readily re-

* P. 86.

moved

moved when they firſt appear; but if neglected, become painful to the patient, and troubleſome to the practitioner. Others can be more eaſily prevented than cured.

In a work of this kind, although the nature of all theſe diſeaſes ought to be explained, the treatment of many of them muſt be neceſſarily paſſed over, as it ſhould be referred to the care of medical practitioners, and ought never to be undertaken either by the patient herſelf or the attendants.

WHEN, along with the ſymptoms which are occaſioned by the determination of milk to the breaſts, any Hardneſs or painful Swelling is felt in either of theſe organs, if theſe do not ſubſide after the child has been applied, and the treatment formerly recommended has been purſued, immediate attempts ought to be made to prevent the progreſs of inflammation, by the uſe of a large poultice, formed of ſoft bread, and the preparation of Sugar of lead, deſcribed in page 111.

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If the feverifh fymptoms are very violent, and the patient is of a full habit, blood fhould be drawn from the arm, and fome gentle cooling laxative ought to be prefcribed. The child fhould be applied when neceffary, with the precaution of previoufly wafhing the affected breaft or breafts with a little warm milk and water, to prevent the infant from being injured by the medicine.

When, notwithftanding a continued perfeverance in this plan, the Swelling or Inflammation increafe, along with hardnefs, throbbing pain, and heat in the affected part, and general fever, a foft poultice of bread and milk, or of Linfeed, fufficiently large to cover it, ought to be applied, and renewed as often as it may be fuppofed to be cold; the breaft fhould be fupported by a handkerchief fufpended from the neck.

Suppuration will in this manner be fpeedily promoted, (when that circumftance cannot be avoided); and the matter, as foon as it is well formed, fhould have an outlet by the ufe of the Lancet; which, though apparently formidable, caufes much lefs pain, than if the opening were trufted to nature.

The ſore may be afterwards dreſſed by a pledget formed of Baſilicon or Spermaceti ointment, ſpread on ſoft charpee; and while pain, inflammation, or hardneſs continue, the poultice ſhould be applied over the dreſſings.

It muſt not be concealed, that the cure of Boils in the breaſts will always be more or leſs troubleſome, according to the ſeat of the diſeaſe; for when they are ſituated deep, they are generally tedious in their progreſs to ſuppuration, exceedingly painful, and attended with a conſiderable degree of fever, by which the conſtitution is often impaired, and great weakneſs induced. In ſuch caſes, the patient is unable to continue to nurſe her child.

But if theſe Boils are quite ſuperficial, they ſoon ſuppurate, commonly burſt ſpontaneouſly, and affording a free exit to the matter, heal kindly and ſpeedily; and not only do not impede ſucking, but often occaſion little uneaſineſs.

THE *Nipples*, from the delicacy of their ſtructure, are very liable to be injured by the action of the child's mouth in ſucking,

ing, along with the irritation which the ſtagnant milk occaſions, unleſs they be kept very dry.

The moſt ſimple and favourable diſeaſe proceeding from theſe cauſes, is Excoriation, or great degree of tenderneſs in the nipples; which, although the ſource of conſiderable pain, ought not to prevent the patient from giving ſuck. Women are ſubject to this complaint more frequently while nurſing their firſt or ſecond child, than afterwards; for the Nipples loſe much of their ſenſibility by uſe.

In the treatment of this diſeaſe, the great object to be attended to, is, to remove, as much as poſſible, every circumſtance which can tend to irritate theſe parts.

With this view, the Nipple ought to be waſhed frequently with any gently ſtimulating liquor, which will diminiſh its ſenſibility; as Brandy and Water, a weak ſolution of Alum, or of Sugar of Lead in Roſe-Water, &c. The milk ſhould be prevented from wetting theſe parts, by the application of broad Breaſt-glaſſes, or rings of Boxwood, Ivory, or Lead: The latter of theſe are commonly uſed in this coun-

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try; they are well adapted for keeping the nipples cool, as well as dry, and for defending them from injuries from the woman's clothes. All theſe rings ſhould be conſtructed in ſuch a manner, as to allow the Nipple to protrude through them.

The ſore-breaſt ought to be favoured as much as poſſible; and if both be affected, the ſame purpoſe may be accompliſhed, by procuring the aſſiſtance of a milk-nurſe, to take care of the child during the night. Whenever any medicine is applied to the breaſt, it muſt be carefully waſhed off with a little warm water, before the child be allowed to ſuck.

When, inſtead of purſuing theſe means with proper perſeverance, ſore nipples are neglected at firſt, they often prove diſtreſſing in the higheſt degree to the patient, and it becomes very difficult to ſtop the progreſs of the diſeaſe. Deep ſores are occaſioned, which reſiſt the power of every remedy in many caſes, as long as the woman gives ſuck, and which may terminate in the total deſtruction of the breaſt, if ſhe perſeveres in nurſing.

Theſe

These ſores or chops require very particular management. When the mother is anxious to nurſe, if they are not very deep, although a cure cannot be ſoon obtained, the diſeaſe may be rendered ſupportable, and the pain conſiderably leſſened, by proper dreſſings, till the ſenſibility of the parts is diminiſhed, and a favourable turn given to the complaint.

The art of dreſſing theſe chops conſiſts in applying to the ſores a ſmall ſtrip of Charpee, dipped in a ſolution of Sugar of Lead, or Alum, and covering the whole with a piece of old clean linen, ſpread with a Liniment, compoſed of white Wax, Spermaceti, and Oil of Almonds, or the common Spermaceti Ointment.

The dreſſing ſhould be continued as long as poſſible, and ought to be removed only two or three times a-day, in order to allow the child to ſuck; before which, the precautions already ſuggeſted muſt be obſerved.

When the chops do not heal by theſe means, the child ought to be removed, and given

given to a milk-nurſe, otherwiſe the whole breaſt may be deſtroyed.——In obſtinate caſes, the ſores ſhould be touched by means of a fine hair pencil, with the Liniment deſcribed in the Forms of Medicine, which often produces a cure in a very ſhort time, after every other method has failed.

Women who have been ſubject to Sore Nipples, ſhould endeavour in future to diminiſh the ſenſibility of theſe parts, by applying to them for ſeveral weeks previous to delivery, cloths dipped in Alum water, in ſtrong ſpirits, or in the pickle of ſalted meat boiled; which latter has been recommended as an infallible ſpecific for that purpoſe.

When little ſores appear in the brown Circle ſurrounding the Nipple, and correſpond with ſimilar appearances in the child's mouth, or other parts of its body, a medical practitioner ſhould be immediately conſulted. The caſe is more urgent, if hard ſwellings in the arm-pits of the nurſe have already begun.

CHAP.

CHAPTER III.

FEVERS WHICH OCCUR IN THE CHILD-BED-STATE.

IF the management during labour, and after delivery, which has already been fully pointed out, be carefully obſerved, there is little hazard that Fevers, from any cauſe, (unleſs the temporary ſymptoms induced by the Milk be ſo ſtyled), will occur to interrupt the progreſs of recovery.

But when, by imprudent treatment, the patient is expoſed to any exciting cauſe of fever, it will be eaſily underſtood, that from her peculiar ſtate after delivery, the danger ariſing from a diſeaſe, the event of which is always uncertain, muſt be proportionally increaſed.

In this Chapter, the nature of the Fevers which originate from improper management,

nagement is explained; but as their treatment ſhould be entruſted to ſkilful Practitioners alone, the means for preventing their occurrence or progreſs, are more fully detailed, than the method of cure.

SECTION I.

FEVER *from* INFLAMMATION *of the* WOMB*.

INFLAMMATION of the Womb commonly occurs at ſome time between immediately after delivery and the fifth day, though in ſome caſes later. It is generally preceded by ſhivering, which is

* Were this work deſigned for the uſe of Medical Practitioners alone, perhaps the arrangement of the Subject of this Section might be improper; but when the nature of the diſeaſe is conſidered, it will appear that Inflammation of the Womb could not be placed in any other Chapter of this Book.

followed

followed by intenſe heat, quick hard Pulſe, great thirſt,, &c.

A violent pain in the Womb is felt from the beginning: it gives the ſenſation of fulneſs and weight, with throbbing and burning heat in the part. The immediate ſeat of the pain depends on the particular part of the Womb which is affected. In ſome caſes, therefore, it extends towards the navel, or is confined to above or below the ſhare-bones; in others, it ſtrikes backwards, or down both thighs; and when that part of the uterus in contact with the bladder is the ſeat of the diſeaſe, great pain and difficulty in making water will be felt, and ſometimes even a total ſuppreſſion will be occaſioned.

When inflammation of the womb takes place during the red-coloured lochial evacuation, that diſcharge will ſoon be ſenſibly diminiſhed, or will ceaſe entirely.

This diſeaſe is diſtinguiſhed from After-pains, by the pain being conſtant, and not, as in that complaint, alternated with intervals of eaſe; and by the ſenſation occaſioned being very different from that of After-pains; for along with theſe, no throbbing

bing pain, attended with burning heat, is felt, but merely grinding-pains, like the throes of labour.

Many caufes tend to induce inflammation of the womb; fuch are, difficult or tedious labour, artificial efforts to deliver the child and its appendages improperly conducted, the exhibition of heating and ftimulating drinks, &c. during or after labour, expofure to cold after delivery while the woman perfpires freely, or the immediate application of cold to the womb while the cleanfings flow.

Inflammation of the uterus terminates as the fame difeafe in other parts of the body; but from the great fenfibility of the womb, and its extenfive influence, together with the ftate of the contiguous organs in the belly after delivery, its event muft be always very precarious, even where Suppuration takes place. When Mortification is the confequence of this formidable complaint, the fatal termination happens within a fhort time from the beginning of the difeafe.

As the progrefs of inflammation of the womb is always rapid, if not ftopped when it

it firſt appears, the life of the patient will often depend on the original ſymptoms being properly underſtood.

If the fixed throbbing pain, along with hard quick pulſe, increaſed heat, thirſt, &c. are diſregarded at firſt, it will not be eaſy even to moderate the diſtreſs, or leſſen the danger of the woman. Nurſes and attendants ſhould be therefore taught not only to guard againſt the exciting cauſes of this diſeaſe, but alſo to dread the occurrence of theſe ſymptoms, and to take the earlieſt opportunity to mention them to the medical aſſiſtant.

When the practitioner is called in at the beginning of inflammation of the womb, its progreſs may be not unfrequently ſtopped by blood-letting, the injunction of a very ſpare diet, plentiful dilution with cool acid drinks, by clearing out the bowels by means of gentle laxative medicines, or *Lavemens*, and by fomentations applied to the belly. When this treatment is ſucceſsful, an univerſal ſweat takes place, with an evident remiſſion of the painful ſymptoms.

 But

But if this does not happen, and on the contrary, the pain becomes more acute with increafed throbbing, and a greater degree of fever, together with ficknefs, delirium, or much reftleffnefs, the inflammation may then be expected to terminate either in Mortification or Suppuration. In the former cafe, the languid ftate of the pulfe, the low delirium, and clammy fweat, will fufficiently indicate the event: But in the latter, the pulfe continuing firm and full, and the throbbing pain becoming more violent, fhew that fuppuration will enfue.

Mortification moft generally occurs where the body has been previoufly much weakened, or where the habit is very bad. Practitioners who are not called till the difeafe has continued for fome time, fhould pay much attention to the fituation of the patient. If they miftake the fulnefs of the pulfe which takes place while the fuppuration is going on, and order blood-letting at that ftage of the complaint, the fuppurative procefs will be either interrupted, and gangrene induced, or from the weaknefs which will unavoidably enfue, the

unfortunate

unfortunate woman will be rendered unable to reſiſt the debilitating effects of the diſcharge of matter.

The beſt outlet for the matter, is by the paſſage of the womb: But this favourable event does not always happen; for ſometimes it is diſcharged through the ſtraight gut, but more often by an abſceſs in the groin, in which caſe the cure is tedious, and a conſiderable lameneſs for a long time is frequently the conſequence.

During the diſcharge, the Peruvian bark, in ſubſtance or decoction, ſhould be taken twice a-day; nouriſhing diet, with plenty of ripe fruit, ought to be recommended; the belly muſt be kept open; and if the matter comes off by the vagina, that organ muſt be often waſhed, in the manner already mentioned, in order to prevent excoriation.

SEC-

SECTION II.

Irregular Feverish Attacks.

WOMEN are ſubject, for two or three weeks after delivery, to irregular feveriſh attacks, if they happen to be imprudently expoſed to cold, or have not paid ſufficient attention to thoſe regulations in their management with reſpect to diet, &c. already explained.

Theſe feveriſh fits, ſtyled in this country *Weeds*, differ from other fevers in duration, for they ſeldom continue above twenty-four or thirty-ſix hours.

Theſe complaints begin with univerſal cold, and violent ſhivering, commonly accompanied with headach, and ſometimes with ſickneſs. After theſe ſymptoms have continued for ſome time, a great degree of heat ſucceeds, followed at laſt by a copious ſweat, which terminates the diſeaſe,

eafe, but leaves the patient confiderably weakened.

Irregular fevers of this kind are feldom productive of any immediate danger; but from the difpofition to future attacks which is always induced, a foundation is laid for fubfequent complaints, efpecially if a proper treatment be not purfued.

Symptoms refembling thefe irregular feverifh attacks precede inflammation of the breafts, or of fome of the organs neceffary to life, and have often been miftaken for them. There is, however, an obvious diftinction between thefe diforders; for when inflammation has taken place, there is always a fixed pain in the affected part, and the heat of the body, and quicknefs of pulfe, are conftantly much more confiderable than in the irregular feverifh complaints which form the fubject of this fection.

In the treatment of Weeds, little aid from medicine is in general neceffary; for proper attention to the following fimple management will commonly be fufficient to overcome the difeafe, and prevent its return.

During

During the cold fit, the endeavours ſhould be directed towards reſtoring warmth to the patient; but the means uſually purſued for this purpoſe are highly improper; for ignorant attendants, with this view, heap on great loads of bed-clothes, and pour in quantities of heating and ſtimulating drinks, by way of cordials, which readily induce violent delirium, or a more obſtinate fever. No real advantage can be derived from additional bed-clothes; becauſe, by their weight, difficult or oppreſſed reſpiration may be occaſioned.

If the ſhivering be exceſſive, warm flannels ſhould be applied to the ſtomach and belly, and the ſame, or bottles filled with warm water, ought to be put to the feet.

Warm diluent drinks, as Orange-whey, Barley-water, Gruel, Cow-milk whey, &c. may be freely drank, and ſhould be always preſcribed. When the patient is very weak or low, a ſmall proportion of wine will be neceſſary; but that ought to be avoided, if poſſible. If there is reaſon to believe that the ſtomach is diſordered, which may

may be diſcovered by the appearance of the tongue, and by the ſickneſs which then attends, gentle vomits are neceſſary.

WHEN the hot fit begins, the drinks ſhould be no longer warmed, but ought to be given almoſt quite cold, a free circulation of cool air in the room muſt be encouraged, and the patient ſhould be lightly covered with bed-clothes. It is vulgarly imagined, on ſuch occaſions, that heat is abſolutely requiſite to promote perſpiration: but the very contrary is the caſe; for when the pulſe is very quick, and the body hot, ſweat can only be induced by leſſening the quickneſs of pulſe, and heat of the body. This is to be accompliſhed by a ſtrict obſervance of the cooling regimen; and for this purpoſe, along with cold drinks and ripe fruits, the Saline or Nitrous Julep will be found beneficial.

By theſe means, the burning heat and thirſt of the woman will be removed, the pulſe will become, regularly moderate, a gentle moiſture will appear over the whole body, and a complete relief from all uneaſy ſenſations will be felt.

The perfect recovery of the patient, however, ought not to be confidered as completely eftablifhed when the fweat comes out; for unlefs careful and judicious treatment be ftill purfued, the moft unfortunate confequences will take place. For if exceffive perfpiration be protracted too long, or checked fuddenly, the effects will be equally hazardous. In the former cafe, nervous complaints or eruptive fevers may be dreaded; and in the latter, a fecond and more fevere attack of the feverifh fymptoms will commonly take place.

The fweating, when moderate, ought therefore to be encouraged, by warm diluent drinks, for fix or eight hours; and then if it does not ftop, the drinks fhould be given in fmall quantity, very feldom, and made lefs warm. The bed and body linens muft be fhifted, and dry clothes, (previoufly warmed, but not much heated), fubftituted in their ftead.

When coftivenefs occurs during the courfe of the complaint, it may be obviated by gently laxative *Lavemens.*

The return of this diforder will be prevented by an attention to proper management,

ment, and eſpecially by guarding againſt thoſe circumſtances which probably occaſioned the diſeaſe. The diet ſhould therefore be ſuited to the conſtitution of the patient: food ought in general to be very light, and of eaſy digeſtion. Where a diſpoſition to nervous irritability prevails, and where the patient has been accuſtomed to a full rich diet, the food muſt be more ſolid and nutritious than in other caſes, and a moderate proportion of wine ſhould be allowed.

The Peruvian Bark, when any ſtrengthening remedy is neceſſary, ought to be preſcribed.

In the irritable ſtate of lying-in women, paſſions of the mind prove a frequent cauſe of irregular feveriſh attacks: they may be moderated by Opiates.

Many women are ſubject to theſe complaints, from the interruptions in their nights reſt which ariſe from nurſing. When this happens, the means for curing and preventing the diſorder obviouſly conſiſt in relinquiſhing a taſk for which ſuch women are very unfit.

SECTION III.

ERUPTIVE *or* RASH FEVER *.

THE improved method of treating Lying-in women, now almoſt univerſally adopted in this iſland, fortunately renders the appearance of the *Raſh Fever* much more uncommon than formerly.

This diſeaſe varies in its ſymptoms in different women, and even in the ſame woman on different occaſions, where the repetition of improper treatment ſubjects the patient to another viſit of the complaint in a ſubſequent lying-in.

The firſt ſymptoms of the Raſh Fever are generally ſhivering, headach, ſometimes vomiting, cold extremities, dull eyes, diſturbed ſleep, weak quick pulſe, and an

* This Complaint is ſtyled in Medical language, the MILIARY FEVER.

almoſt

almoſt total ſtoppage or great diminution of the uſual excretions. Theſe complaints continue for a conſiderable time, and are attended with remarkable dejection of ſpirits, and exceſſive deſponding anxiety, and at laſt followed by a ſudden and violent four-ſmelling ſweat, pricking of the ſkin, and an eruption. Some time before this appears, the pulſe becomes full and ſtrong.

The eruption or raſh is at firſt confined to the neck, breaſt, and arms, but it ſoon ſpreads over the whole body, and ſeldom affects the face. The appearance of the eruption varies according to the conſtitution of the patient, or rather according to the ſituation in which ſhe is when the diſeaſe takes place: it moſt generally occurs in the form of red diſtinct ſmall pimples, which can be felt to be prominent; but ſometimes theſe are white or yellow, except at the baſe. The former of theſe eruptions, (commonly diſtinguiſhed by the name of *Ruſh*), is more favourable than the latter, which affects only thoſe patients who are much weakened, and have a diſpoſition to complaints attended with ſymptoms of putreſcency.

The

The duration and consequences of this fever are as various as the constitutions of the patients whom it attacks. In the mildest species of the disease, the eruption and feverish symptoms continue three, four, or five days, and are followed by a considerable degree of weakness, which, however, yields in a short time to proper management. But when the pimples are white or yellow, they often continue a long time; for as one crop disappears, another, after some interval, is produced, even to the third or fourth succession: In such cases, the weakness is much greater than in the other species of the eruption.

The event of Rash Fever may always be expected to be favourable, when the distressing symptoms abate on the appearance of the eruption; but if this does not happen, if the pulse continues small and weak, if frequent cold fits occur, if fetid stools are passed involuntarily, and if convulsions attend, much danger is to be dreaded.

The circumstances which occasion this disease, certainly originate from improper treatment

treatment after delivery; for whenever a woman in such a fituation is confined within a heated room, oppreffed with a great quantity of bed-clothes, and forced to drink ftimulating liquors, with the view of promoting a fweat, according to the abfurd and pernicious cuftoms formerly obferved in the treatment of lying-in patients, fhe is almoft always feized with Rafh Fever. A difeafe of the fame nature, it may be mentioned, in confirmation of this opinion, fometimes fucceeds the fame treatment of Men who have been weakened by profufe evacuations.

The Rafh Fever can therefore be generally prevented, though when it has taken place, it is not eafily remedied. If any arguments in addition to thofe already adduced, were neceffary to enforce the obfervance of the plan formerly fuggefted, for the treatment of women after delivery, the hiftory of this complaint would furnifh fome very powerful ones.

The cure of this difeafe depending on a variety of circumftances, cannot be reftricted to any particular method.

In

In the beginning of the fever, if ſickneſs attends, a vomit ſhould be preſcribed; and in every caſe, gentle laxatives are neceſſary and beneficial: Where the cold fits are very frequent, or there is reaſon to dread delirium, fomentations, by means of flannels, wrung out of warm water, applied to the legs and thighs, are often of ſervice; they ſhould alſo be employed where the eruption ſuddenly recedes. Theſe fomentations muſt not be uſed too hot, nor continued ſo long as to force out profuſe ſweats.

In ſome *rare* caſes, *Blood-letting* is neceſſary; but much judgement is required to diſtinguiſh the propriety of having recourſe to ſuch a practice; becauſe, if it is employed where the ſymptoms of inflammation are not violent, it is a very dangerous expedient. The fulneſs of the pulſe when the eruption appears, is apt to impoſe on inattentive practitioners, and to lead them into much error.

Every means which can moderate the heat of the body and the quickneſs of the pulſe, ought to be uſed when the eruption comes out; a free application of

cool

cool air is therefore particularly neceſſary: If the woman has been previouſly kept very hot, the change muſt be made in a gradual manner. The Nitrous mixture, cool acid drinks, ripe fruits, and a light diet, ſhould be recommended.

When the patient is much weakened, and the raſh is white or yellow, the Peruvian Bark ought to be given in ſuitable doſes.

If the pulſe continues weak after the eruption, wine, along with the Bark, in a quantity proportioned to the ſtate of the patient, will be found uſeful.

SECTION IV.

Malignant Childbed Fever.

PRACTITIONERS differ much in the defcription of this difeafe, and in the method of cure which they adopt.

That this fever frequently occurs in confequence of mifmanagement, there can be no doubt; but notwithftanding the opinion of many refpectable authors, there is reafon to believe, that it does not, like that defcribed in the laft fection, *always* originate from improper treatment after delivery.

In oppofition to this opinion, it may be urged with much plaufibility, that the malignant childbed fever does not take place fo often in patients who are under the care of judicious practitioners, as in thofe who are unfortunately committed to the charge of unfkilful perfons.

This

This circumſtance, however, can be perhaps explained in a manner which will confirm, inſtead of refuting the opinion. For it is more than probable, that by proper attention to the firſt ſymptoms of this fever, the progreſs of the diſeaſe may be often completely prevented.

Every woman, therefore, ſhould be acquainted with the ſymptoms which indicate the approach of this diſeaſe; for by calling in proper aſſiſtance at the beginning, in many caſes, the fatal effects can only be obviated.

The malignant childbed fever commonly occurs about the evening of the ſecond or third day after delivery; but in ſome caſes, later: The woman is ſeized with ſhivering, attended with pain in the head, eſpecially above the eye-brows. This is followed by a hot fit, ſucceeded frequently by a free perſpiration, which ſeems to relieve all the ſymptoms; but this is often a delufive appearance, for a ſecond attack ſoon enſues, and the ſlight remiſſion is only a prelude to an increaſe of complaints.

After the ſhivering, the belly becomes univerſally ſore to the touch, which in many caſes renders the weight of the bed-clothes intolerable: The ſoreneſs is frequently more conſiderable in one part than another; no ſwelling nor hardneſs can generally be at firſt perceived.

The breathing of the patient, although not oppreſſed nor interrupted by wheezing or coughing, is very uneaſy; for as ſhe feels the pain in the belly always ſenſibly increaſed every time ſhe breathes fully, ſhe endeavours to obtain relief, by only half-breathing as it were.

The pulſe is quick, in general full and ſtrong at firſt, but afterwards weak.

Theſe are the principal characteriſtic marks of this diſeaſe; but in every caſe, other ſymptoms attend, which vary according to the conſtitution of the patient, and many other circumſtances.

On ſome occaſions, this fever begins with violent ſickneſs and vomiting, or ſevere looſeneſs; and in other caſes, the belly is quite bound for the firſt two or three days. When vomiting occurs, the matter thrown up at the beginning is yellow-

iſh;

iſh; but when this ſymptom takes place towards the fatal termination of the complaint, it is ſomewhat like coffee grounds; the ſtools, commonly looſe, are always very fetid.

The urine is at firſt paſſed with difficulty, or totally ſuppreſſed till after a ſtool or two; it is of a dark colour, and on being ſet at reſt, a ſediment appears half floating near the bottom of the glaſs.

In many caſes the Milk and Lochial diſcharge appear to be natural for the firſt two or three days of the diſeaſe. Sometimes there is no ſecretion of the former; but the latter is very ſeldom ſuddenly ſtopped.

The Skin in ſome patients is in the ordinary ſtate, both with reſpect to heat and moiſture; but in others it is very hot and dry at firſt, and afterwards always covered with a clammy ſweat.

The Face is commonly much fluſhed, the eyes ſunk, and the patient is remarkably dejected. She has uſually great thirſt, and is ſo uneaſy that ſhe can only lie on her back.

After

After a day or two, the belly begins to be ſwelled, and becomes tenſe.

If the woman has been coſtive at firſt, the looſeneſs which ſucceeds generally occaſions much immediate relief. But the eaſe is merely temporary; for the pulſe continues quick; the pain of the head, uneaſy breathing, ſoreneſs of the belly, ſoon return with increaſed violence; the teeth become covered with a black or brown cruſt; and ſometimes delirium ſupervenes.

Theſe ſymptoms, or many of them, continue for ſome days; the patient at laſt paſſes ſeveral fetid ſtools, uſually involuntarily. She then imagines that ſhe is free from all danger, as ſhe feels completely relieved from all pain; but the increaſed quickneſs of her pulſe, cold extremities, &c. announce to the practitioner the approaching fatal termination of this dangerous diſeaſe. When this happens, it takes place at different periods of the fever, moſt commonly from the ſeventh to the twelfth or fourteenth day.

But when the malignant childbed fever does not prove fatal, although all the

complaints

complaints are milder, yet there is no diſtinctly-marked critical termination, as in other fevers; for the ſymptoms abate very gradually, and the patient can never be pronounced out of danger for a great many days. She is at laſt left in a ſtate very much weakened, but relieved from all the uneaſy ſenſations which ſhe formerly ſuffered.

The nature of this diſeaſe cannot be explained, nor the means of cure detailed, in this work. As the complaint is always attended with much danger, and as the treatment in ſuch caſes depends on the general principles of cure of fevers, together with attention to the particular ſtate of women after delivery, it is obvious, that the moſt ſkilful practitioner who can be procured ought always to be had recourſe to.

The malignant childbed fever occurs frequently in hoſpitals, when the wards are not kept ſufficiently ventilated: On theſe occaſions, the ſymptoms of the diſeaſe are ſomewhat different from thoſe obſerved in private families; the event is more generally fatal; and, till the wards are completely

pletely purified, every woman delivered in them is ſeized with the fever.

In every Lying-in hoſpital, therefore, one or more ſpare wards ſhould be provided, in order to prevent that particular vitiated ſtate of air which originates from a room being occupied by a number of perſons for a long continuance of time, even although every precaution with reſpect to the uſual method of ventilation be adopted.

M A-

MANAGEMENT

OF

CHILDREN IN EARLY INFANCY.

INTRODUCTION.

THE Child, when in the womb, surrounded by a fluid, which defends it from external accidents, and supplies it with an equable degree of heat, nourished by a somewhat which its own organs do not prepare, and furnished with the vivifying principle of air, by a beautiful and wonderful machinery, may be said to vegetate only.

But when separated from the mother by the process of delivery, it undergoes a great

great and important revolution. The ſupply of heat, and protection from injury, muſt depend on the attention of others; nouriſhment muſt be prepared by the digeſtion of food received into its own ſtomach; and the benefits of air can be obtained by the operation of breathing only.

Had not Nature bountifully provided for theſe changes, the human race muſt have become extinct. It cannot therefore be imagined with propriety, that dangers originate from the ſtate in which children muſt neceſſarily be immediately after birth, except from miſmanagement.

The proofs which have been adduced in favour of an oppoſite opinion tend only to ſhew inconteſtibly the ignorance and inaccuracy of the obſerver; for the cries which children almoſt univerſally utter for ſome time after they are born, are not in conſequence of pain, but are the means by which the revolution in their frame is completely eſtabliſhed.

The bodies of infants differ from thoſe of grown perſons in many reſpects, beſides the ſize and external form. A knowledge

ledge of theſe will elucidate the manner of treatment of children in health, and during diſeaſe, and ought therefore to be acquired before that ſubject is conſidered.

Differences in the Structure of NEW-BORN CHILDREN *from that of* GROWN PERSONS.

IN Children, the Nerves are in larger proportion: their powers alſo are greater: hence many circumſtances, as cold, heat, &c. have conſiderable influence on them, which do not ſeem to affect grown perſons.

All the Veſſels are much more numerous; their action is more frequently repeated; and therefore the pulſe of children is always very quick, and all the ſecretions and excretions are more ſpeedily performed, and in greater quantity.

The Fleſhy parts are more ſoft, and leſs diſtinctly marked; their actions are conſequently not ſo powerful.

The Bones are ſoft, ſpongy, and imperfect. Thoſe which are afterwards ſingle are

are generally divided into ſeveral portions; and almoſt all the bones have their extremities or edges in the ſtate of griſtle. The bodies of children, therefore, have not an exact regularity of ſhape, and are not well ſupported. Their different parts are not ſo ſteadily moved; and the organs lodged in the cavities are not ſo well defended.

The Appendages of the Bones are in much larger proportion: hence the moveable and immoveable articulations are leſs firm.

The Cellular Subſtance is alſo in a greater proportion, which occaſions the irregularity in the ſhape of the ſoft parts.

All the Fluids are more mild and watery, and furniſhed in greater quantity. The Chyle and Blood are more nutritious, and the latter is leſs acrid. The Slimy and Gelatinous fluids are more bland; the Bile and Urine have very little acrimony.

The Skin is more delicate and beautifully coloured: it is more ſenſible to external impreſſions, for the *ſcarf ſkin* is very thin and ſoft. Below the ſkin, a large quantity

quantity of fat is generally collected, which hides the form of the fleshy parts.

THE HEAD is large in proportion to the body. Its bones are not indented into each other, but connected by membranous layers: hence the Brain, which is very soft, may be readily compressed and injured.

The Face has not the expression which it afterwards assumes. The *Eyes* at first have no power of distinguishing objects. They, and their appendages, are remarkably delicate; and therefore suffer from the slightest accidents. The *Nose*, from the state of its bones, is also much exposed to injuries; and the sensibility of its nerves renders it highly irritable: but the bad effects which would often be the consequence of this structure are probably counteracted by the mucus which constantly covers the inside of that organ. The *Ears* for some time, like the eyes, do not appear to possess much power. The *Mouth* is not usually supplied with teeth till some months after birth; for altho' formed, they remain under the Gums till that time. The

The lower Jaw-bone is divided by a portion of griſtle into two pieces.

The Trunk of the body is not ſo firm as to ſupport properly the ſuperincumbent parts, nor to defend the organs contained in it; for a great part of the *Spine* is griſtly, and the Breaſt entirely ſo. The Ribs indeed are more perfect than many of the other bones; but they can eaſily be made to yield from the ſtate of the breaſt: and the fleſhy parts, &c. which ſurround the belly, being ſoft and delicate, cannot afford reſiſtance to any circumſtance which may injure the bowels.

The *Lungs*, hitherto ſmall, collapſed, and ſupplied with little blood, immediately after birth, begin to perform the operation of breathing, and to receive the whole blood of the body; which functions continue during life. Theſe organs are at firſt weak and irritable. The Heart acts with conſiderable force and quickneſs.

The *Liver* is of a remarkably large ſize in proportion to other parts, and is not ſo well defended as afterwards. The Gall Bladder is nearly in the ſame proportion.

The

The Stomach differs only in ſize, and in delicacy of ſtructure; and the ſame may be ſaid of the Inteſtinal Canal. But in the Great Guts, a ſubſtance different from what is obſerved in grown perſons is lodged: it is a black, viſcid, tenacious matter, called by Medical people *Meconium.* The Kidneys are lobulated; and the Renal Glands are larger in proportion. The Urinary Bladder, and other organs in the Baſon, are differently placed, as that cavity is very imperfect, from the griſtly ſtate of the bones of which it is compoſed.

THE EXTREMITIES are weak, and almoſt uſeleſs. The condition of the articulations, and quantity of griſtle on the ſuperior and inferior extremities, render them incapable of performing their proper functions for a conſiderable time.

THESE remarks will explain the neceſſity for thoſe cautions in the management of Children which are ſuggeſted in the following pages.

CHAP-

CHAPTER I.

MANAGEMENT OF INFANTS, WITH RESPECT TO CLEANLINESS, CLOTHING, FOOD, AIR, AND EXERCISE, &c.

FROM the view which has been exhibited of the ſtate of Children after birth, it will be obvious, that much attention muſt be paid to circumſtances which in grown perſons almoſt eſcape notice.

The great mortality of children which prevails among the poor in large cities may perhaps be attributed chiefly to the neglect of the treatment recommended in this Chapter; and therefore it cannot be too minutely detailed, nor too implicitly followed.

SECTION I.

Cleanliness.

THE Skin of Children at birth is covered with a thick glutinous matter, which forms a ſcurf over the whole ſurface. The firſt care of the Nurſe is generally to remove this, to which ſhe is induced, both from the prejudices of the Mother and Attendants, and the advice of Medical Practitioners.

This ſubſtance, from whatever ſource it proceeds, is certainly furniſhed by Nature to defend the child from injuries in the womb, to which it would be expoſed by being ſuſpended in a fluid.

The propriety of the ordinary means of removing this glutinous matter immediately after birth, has long appeared to me to be very doubtful; and therefore, in a pub-

lication ſome years ago *, I obſerved, that " it is of little conſequence whether it " be entirely taken off the firſt day or " not." The experience of many years has now perfectly convinced me, that not only the attempts which are made by Nurſes to waſh off all the tenacious matter from the ſkin of new-born infants are productive of much miſchief, but that it is really immaterial whether the whole of it be waſhed off at firſt or not; for as it becomes dry, and forms a kind of cruſt, it is eaſily removed at the ſecond and third waſhing.

In confirmation of this opinion, it might with ſome plauſibility be urged, that the ſudden expoſure of the undefended ſkin to the air may be attended with bad effects; but, without having recourſe to ſpeculative reaſoning, it muſt ſurely be obvious to every one who underſtands the delicate ſtate of the child's ſyſtem, that the rude hands of a rough nurſe rubbing violently every part of the body, will unavoidably either fret the tender ſkin, or, by compreſ-

* Treatiſe of Midwifery, &c. 1780.

ſing

ſing the various internal organs, derange their nicely conſtructed mechaniſm.

The firſt waſhing, therefore, ſhould be performed with very great gentleneſs and caution, by means of a weak ſolution of ſoap in warm water, which is preferable to any of the waſhes often employed. Spirits are highly pernicious; and greaſy ſubſtances can never be uſeful, and may perhaps prove hurtful. The Neck, Arm-pits, and Groins, commonly require more attention than any other part, becauſe the ſcurf is thicker on them; and rough rubbing, eſpecially on the latter parts, might be very injurious. Long continued attempts to bring off every ſuppoſed impurity, however gentle, ſhould never be allowed; for, as has been already obſerved, what remains will readily yield to the next waſhing.

The moſt ſcrupulous attention to Cleanlineſs in other reſpects, not only after birth, but during the whole period of Childhood, cannot be too ſtrongly inculcated. For the firſt two or three weeks, the infant ſhould be bathed, morning and evening, in tepid water, and afterwards in

cold water. The whole body ought to be washed in the morning, and the lower half at night.

The advantages of the Cold Bath have been long almost universally understood in Great Britain; and in this part of it at least, children are very properly bathed in it every morning till two or three years of age. Speculative Philosophers only have objected to a practice which is highly beneficial to health.

Every part should be kept quite dry; and all accidental impurities, as wet cloths, &c. must be removed as soon as discovered.

SECTION II.

Cloathing *of* Infants.

THE unnatural tight swathing in which Children were formerly incased is now fortunately exploded; and long established custom has in this respect happily yielded to the suggestions of reason and

and experience. The ſtricture of bonds and rollers muſt not only be painful, but hazardous; for by theſe means the circulation is interrupted, and the growth in ſome parts is ſuddenly checked; while in others an improper direction is given to it.

Perhaps, however, theoretical reaſoning might lead into an oppoſite error to what is now aboliſhed; for the wiſh to allow the child all the eaſe poſſible, may make thoſe precautions in the dreſs which the experience of Nurſes teaches them, appear unneceſſary or improper.

The diſpoſition, therefore, which Infants uſually have to rub their eyes with their little hands, renders the ſimple contrivance of the women to prevent this circumſtance, eſſentially requiſite, otherwiſe the eyes may be much injured.

The Cries of the child are very apt to occaſion a protruſion of the inteſtines at the Navel. This diſagreeable accident may be often prevented by the application of a ſoft broad piece of thin flannel, in the form of a roller. It ſhould never be made tight, otherwiſe it may not only hurt

hurt the bowels, but perhaps induce ruptures at the lower part of the belly.

With theſe precautions, the Cloathing of infants ſhould be light and ſimple, conſtructed in ſuch a manner that it may be eaſily and readily applied. It ought to be ſuitably adapted to the climate and ſeaſon, and ſhould always be at firſt made to afford a conſiderable degree of warmth, that the change from the warm ſituation in which the child was formerly placed, to the comparatively cold one in which it is after birth, may not be ſo ſenſibly felt as to occaſion pain.

Tape ſhould always be uſed, inſtead of pins; and the whole dreſs ought to be ſo looſe, that the child may have free liberty to move and ſtretch its little limbs, as far as that is conſiſtent with its welfare.

The Linens, next the ſkin eſpecially, ſhould be often changed; and the infant ought never to have on the ſame dreſs for twenty-four hours continued.

The Night-cloaths muſt not be equal in quantity to thoſe which are worn during the day; otherwiſe the child will be continually

continually diſpoſed to be affected with colds, &c.

An unnatural cuſtom has been introduced by Nurſes, which ought to be guarded againſt by every parent who regards the future health of his offspring, the practice of confining the limbs of the child much more ſtrictly by the cloaths during the night than in the day. By ſuch means the purpoſes of reſt are defeated, and ſleep is even often interrupted.

The Night-cloaths ought therefore to be quite looſe, and as much lighter than thoſe which are put on during the day, as the difference of ſituation ſhall render neceſſary, ſo that the infant may be placed in nearly the ſame degree of heat at all times. For the ſame reaſon, when the child ſleeps in his day-cloaths, he ſhould be very ſlightly, or rather not at all covered.

SEC-

SECTION III.

NUTRITION *of* INFANTS.

THE experience of many ages, as well as the arguments which may be adduced from analogy, has proved to the conviction of every candid inquirer, that MILK is the moſt natural and wholeſome food for children in early infancy. The attempts which ſpeculative philoſophers have from time to time made, to ſubſtitute other kinds of food from that prepared by Nature for the purpoſe of nutrition, have only furniſhed many melancholy proofs of their errors, or ſhewn that the powers implanted in the human conſtitution ſometimes overcome even the dangerous effects of inconſiderate prejudice.

The important advantages which reſult from *Nurſing*, both to the mother and child, have been ſo often explained, and are

are ſo generally underſtood, that they do not require any illuſtration on this occaſion.

It has been improperly imagined, that all Mothers ought to be Nurſes. By this opinion, many children have been deſtroyed, and a greater number have only lived to regret their exiſtence; the weakneſs of their frames having made them incapable of feeling thoſe pleaſures which originate from good health.

The luxuries which refinement has introduced in the manner of living, although they do not prevent every woman from being a Mother, certainly render many very unfit for the office of a Nurſe. A delicate woman, neceſſarily involved in the diſſipations of high life, and confined to a crowded city, cannot be ſuppoſed capable of furniſhing milk in due quantity, or of a proper quality. Her child muſt either be almoſt ſtarved, or the deficiencies of his mother's breaſt muſt be ſupplied by unnatural and hurtful food.

Theſe are not the only diſadvantages which ariſe from ſuch ladies becoming nurſes; for they themſelves, as well as

their children, ſuffer conſiderably. Obliged to ſubmit to the regulations with reſpect to the hours appropriated to recruit the body by food or ſleep, which faſhion and long cuſtom muſt have rendered habitual, while at the ſame time they attempt a taſk for which the delicacy of their frame ill adapts them, their health will be impaired; and they cannot enjoy thoſe pleaſing ſenſations which are derived from nurſing, where the child thrives.

When, therefore, ladies of this deſcription wiſh to ſuckle their own infants, they ought to retire to the country, where, remote from the impure air of crowded cities, and removed from the allurements of faſhionable amuſements, they ſhould endeavour, by the moſt ſcrupulous attention to regularity in diet, and hours of reſt, and to moderate exerciſe in the open air, to repair their conſtitutions, and to fulfil the duties which they owe their offſpring.

Women in high rank, however, are not the only mothers who ought not to become nurſes; for ſome diſeaſes, although originally

originally induced by improper modes of living, are hereditary in families. The prejudices of the bulk of mankind are ſo much againſt women who ſeem to have any hereditary diſeaſe, that in the choice of a hired nurſe they are always carefully avoided. A pretended diſcovery has led many medical practitioners to diſregard ſuch opinions; and the belief that theſe diſeaſes, from being ſeated in the ſolids, cannot be communicated by the fluids, has induced them to imagine, that ſuch diſorders can never be derived from a nurſe. But if the ſtate of the fluids has any effect on that of the ſolids, if, in other words, the condition of the body depends on that of the juices which ſupply the continual waſte to which its various parts are ſubject, the common ſenſe of the uninſtructed multitude will be found far ſuperior to the refined theories of dreaming philoſophers.

It is therefore incumbent on every practitioner to adviſe ſeriouſly parents who unfortunately are afflicted with any hereditary diſorder, to ſend their infants to be nurſed

in the country by a healthy woman, and to protract the period of nurſing ſome months beyond the uſual time.

When, however, the mother is of a robuſt healthy conſtitution, ſhe is certainly the moſt proper nurſe, and ought to be adviſed to undertake the taſk, on account of her own health, as well as that of her infant.

The child ſhould be put to the breaſt as ſoon after birth as the ſituation of the woman will allow; by which the black viſcid ſubſtance contained in the inteſtines will be better evacuated than by any means which art can furniſh. The pernicious practice of giving children purging medicines as ſoon as born, cannot be too much reprobated; for the retention of the Meconium for ſome hours after birth certainly produces leſs inconvenience than is occaſioned by the acrimony of the ſubſtances which the child is often forced to ſwallow.

The moſt ſimple artificial means for removing this matter, ſuch as plain ſyrup, or a ſolution of manna, ſhould be employed only

only where the milk of the nurſe is not found to anſwer the purpoſe.

Many authors have recommended the practice of allowing the child to ſuck only at ſtated periods; but experience has proved the difficulty which attends ſuch an attempt, and the bad effects which often follow it when carried into execution.

Although thoſe children are moſt healthy and thriving who are leaſt reſtricted, and who are permitted to take the breaſt at pleaſure; yet every woman ſhould avoid becoming the ſlave of her child, as many unguardedly do. The infant ought therefore never to be allowed to ſleep at the breaſt, nor accuſtomed conſtantly to overload the ſtomach by ſucking till vomiting enſues.

Women ſhould always remember, that the mode of life moſt conducive to health will afford the beſt milk, and the moſt plentiful ſupply; and therefore nurſes ought never to eat at irregular times, nor in a quantity which the appetite does not demand; and they ſhould guard equally againſt abſtinence and overfeeding. Fatigue,

tigue, indolence, or inactivity, and every irregularity, muſt be carefully avoided *.

ALTHOUGH Nature ſeldom renders any other food than milk during early infancy neceſſary, yet, with the view of introducing a change of diet by degrees, the practice of early beginning to give the child daily a little pap or panada, appears to be rational; for when it is neglected till the time of weaning approaches, the habit is with difficulty eſtabliſhed; and there is great hazard that the infant may ſuffer from the ſudden change. At firſt, food ſhould be given only once a-day; by degrees it may be increaſed to two meals; and before weaning three ought to be allowed.

Many women begin to give ſpoon-meat to the child a few hours after birth: A practice which ſeldom fails to occaſion ſore mouth, violent bowel complaints, &c. and which therefore ſhould never be encouraged, notwithſtanding the arguments of the dry nurſes.

* For the qualifications of a HIRED NURSE, ſee the APPENDIX.

If bad effects follow the ufe of fuch apparently harmlefs materials as bread and water, what muft be the confequence of the pernicious cuftom of giving infants fpirits in the form of toddy, with the fuppofed view of preventing gripes? Such liquors, however diluted, applied to their tender digeftive organs will unavoidably deftroy or impair their functions, and may lay the foundation for a train of the moft dangerous complaints. It may indeed be urged in favour of this horrid unnatural practice, that many children are accuftomed to weak toddy from a few days after birth, and that they continue to thrive uninterruptedly. But fuch arguments only tend to prove, that the vigour of thefe childrens conftitution is fo great as to refift the ufual effects of ftrong liquors.

Although the panada or pap be now almoft univerfally ufed for the firft food of children, as a fubftitute for the mother's milk; yet fome more fuitable meat may perhaps be given with more advantage, fuch as cow-milk, mixed with a little water and

and ſugar, to which a ſmall proportion of ruſk biſcuit may be added; or weak beef-tea may be ſubſtituted for the milk and water and ſugar.

SECTION IV.

Air, Exercise, &c.

If grown perſons, who have been many years accuſtomed to impure air, often feel themſelves ſick in a crowded room, it muſt be very evident, that a much leſs degree of bad air will affect children, whoſe Lungs are weak and irritable.

As the infant is commonly confined to one or two chambers for the firſt month, care ſhould be taken that theſe do not become filled with impure air, from crowds of viſitors, or from being kept cloſely ſhut up.

When the child has acquired ſo much ſtrength

ſtrength as to be able to withſtand expoſure in the open air, he ſhould be carried out every good day, at the time the ſun has moſt influence. At firſt he ought only to be kept without doors for a very ſhort time; and the perſon who has charge of him ſhould walk ſlowly and gently, and avoid ſtanding, eſpecially in a current of air. By degrees, he may be ſent abroad twice a-day, when the weather is favourable, and be kept out gradually for a longer ſpace of time.

The importance of pure air to children cannot be better illuſtrated, than by comparing the health of thoſe who are nurſed in great towns with that of thoſe reared in the country. "In the year 1767, in con-
"ſequence of the humane ſuggeſtions of
"Mr Jonas Hanway, an act of parliament
"was paſſed, obliging the pariſh-officers of
"London and Weſtminſter to ſend their
"infant poor to be nurſed in the country,
"at proper diſtances from town. Before
"this benevolent meaſure took place, not
"above *one* in *twenty-four* of the poor chil-
"dren received into the work-houſes lived
"to be a year old; ſo that out of two

" thousand eight hundred, the average an-
" nual number admitted, two thousand
" six hundred and ninety died; whereas
" since this measure was adopted, only four
" hundred and fifty out of the whole num-
" ber die; and the greatest part of those
" deaths happen during the three weeks
" that the children are kept in the work-
" houses *."

Although certainly other circumstances besides impure air, such as carelessness, &c. must have contributed to this dreadful mortality; yet the preference of the country air over that of large cities is clearly proved by this fact, and may be confirmed by the meagre looks, sallow complexion, and feeble limbs, of children reared in town, even where the greatest attention has been paid.

ON the proper *Exercise* of Children, more depends than superficial observers would imagine; for by inattention to this circumstance, a foundation is often not only

* Examination of Dr Price's Essay on Population, by the Reverend John Howlett, A. B.

laid

laid for deformities which may deſtroy that beautiful ſymmetry which the Author of Nature has beſtowed on the human body, and may injure the health, but alſo for diſeaſes which, though their firſt approaches are ſlow and gradual, terminate ſuddenly in a fatal manner.

During the firſt few weeks after birth, the infant ſleeps naturally more than two thirds of his time; and therefore the fatigue which he undergoes, from being waſhed, dreſſed, &c. morning and evening, and occaſionally raiſed to be cleaned during the day and night, may be conſidered as ſufficient exerciſe at that period.

The remarkable delicacy of infants, and the griſtly ſtate of their bones, would render any violent agitation of the body for the firſt two months highly dangerous; but in proportion as the child advances in age, the bones become gradually more complete, and the other ſolids more firm: hence a gentle degree of motion, by promoting the free circulation of the fluids, will be highly beneficial.

Every reſtriction to one particular poſition, in whatever ſituation the child may be, ought to be conſtantly guarded againſt; for as the ſoftneſs of the bones renders them eaſily moulded into an improper ſhape, deformities which may deſtroy the health, or prove the ſource of much future diſtreſs, will, if this caution is not obſerved, be readily induced.

An infant ſhould not therefore be laid always on the ſame ſide, nor carried on the ſame arm.

THE uſe of cradles is not now ſo univerſal as formerly; and it is to be hoped will not again become faſhionable. Nature never intended that children ſhould have exerciſe during ſleep, after they have breathed: therefore the idea, that rocking in a cradle reſembles the motion to which infants have been accuſtomed when in the womb, is an erroneous one. The young of other animated beings ſleep quietly and profoundly for a great part of their time without any rocking, although they were alſo habituated to a gentle waving motion before birth.

It

It has been urged, that objections to the employment of cradles, deduced from the abuses which may attend this practice, are inadmissible. But certainly no prudent person will recommend any unnecessary expedient which may be improperly used through inattention.

The charge of the cradle is not always undertaken by the mother; and the nurse, therefore, on many occasions, may agitate the infant more violently than is consistent with its safety, and by such practices injure some of its delicate parts, especially the head.

Children, for these reasons, ought to sleep in bed from the time of birth, although some inconveniences, and even dangers, attend this custom; for it may perhaps often be inconvenient for the mother to carry her infant to the bed-chamber every time he falls asleep; and during the night, if the woman has been unaccustomed to sleep with a child, she may readily overlay it: An accident which unfortunately happens more frequently than is imagined.

Every

Every inconvenience and danger may be avoided by adopting a very ſimple expedient. A Crib or Cradle may be ſo conſtructed as to be fixed to the ſide of the bed during the night, and to be eaſily carried from one room to another during the day. It muſt not be made to rock.

MUCH attention ought to be paid to the ſtate of the child's bed; for it is liable to become wet or foul; and if allowed to remain ſo, may impair the health of the infant. This cannot happen if the bed is ſtuffed with ſtraw, which ought to be renewed from time to time. It is preferable to feathers and wool, which readily attract and retain moiſture and impurities; and it is more ſoft than hair.

CHAPTER II.

DISORDERS INCIDENT TO NEW-BORN CHILDREN.

THE complaints to which New-born Children are liable arise generally in consequence of some injury received during birth, of original imperfections, or of carelessness in the articles of dress, cleanliness, &c.

Some of these disorders are attended with much danger; and others, being only trifling and temporary, yield to the most simple treatment.

SECTION I.

MEANS *which ought to be uſed for the* RECOVERY *of* STILL-BORN CHILDREN.

THE laudable and active exertions of the HUMANE SOCIETY, by having been the means of reſtoring life on many occaſions where it was formerly thought impoſſible, have proved to the world, that *Apparent Death* happens more often than was hitherto believed.

The occaſional recovery of ſtill-born children, under circumſtances where experience alone could have encouraged ſuch hopes, ought to teach Practitioners of Midwifery the importance of employing, with patience and attention, the means conducive to this purpoſe.

The following obſervations are offered, not only with the view of explaining the proper method which ought to be purſued for

for the recovery of ſtill-born infants, but alſo with the intention of rendering the attendants capable of giving hints to Practitioners, which might be overlooked by the embarraſſment natural on ſuch occaſions.

DURING labour, the child is quite inſenſible, and conſequently is merely a paſſive body. This great effect is produced by a very ſimple cauſe, viz. the compreſſion of the brain by the approach of the bones of the head. As this, in general, is merely temporary, the bones reſume their former ſituation the moment the child is born. The preſſure being therefore removed, the infant regains his ſenſibility, and is enabled to begin his new functions.

But when the child is detained in the paſſage beyond a certain time, the long-continued preſſure on the brain induces a ſtate which reſembles the moſt profound ſleep. When born in this ſituation, he appears deprived of life; but the pulſation in the cord ſhews, that bountiful Nature has

not decreed that the vital flame should be ſo eaſily extinguiſhed.

In ſuch caſes, practitioners adviſe the navel-ſtring to be cut, and allowed to bleed a little, from the idea, that the child is apoplectic *.

This practice, however, will be found dangerous and improper; for the loſs of blood, even in ſmall quantity, may be productive of very bad effects on a ſyſtem ſo nicely balanced as that of an infant is; and at the ſame time cannot contribute, except in a remote manner, to remove the cauſe of apparent death. This will be eaſily underſtood, when it is conſidered, that the powers of the child, under ſuch circumſtances, are ſuſpended only in conſequence of the preſſure which is made on the brain by the bones of the head.

When, therefore, the pulſation in the cord is diſtinct, although the infant does not exhibit any other ſigns of life, the communication between him and his mother

* When the efforts which the infant makes to breathe are attended with the appearance of ſuffocation, a few drops of blood from the cord will relieve the child completely.

ought

ought not to be interrupted: the practitioner ſhould ſupport the child, and prevent him from becoming cold. By waiting in this manner, the bones of the head gradually ſeparate; and the preſſure on the brain being removed, he regains his ſenſibility, and is capable of beginning the operation of breathing. When this is known, by the cries, &c. the navel-ſtring may be tied, and divided in the uſual manner.

When ſtill-born children have no pulſation in the cord, if they are not putrid *, the ſuſpenſion of their vital powers muſt have originated from an interruption of the blood in its paſſage to the after-birth, by which the vivifying principle which it receives from that ſubſtance is no longer ſupplied.

When the after-birth is not detached from the womb, although there be no pulſation in the cord, every means for the re-

* It may perhaps appear unneceſſary to remark, that when there are evident marks of putrefaction on the child's body, no attempts for its recovery ought to be made.

covery of the infant ſhould be employed, before the communication between him and the mother is cut off; becauſe, if the blood can be ſent to the after-birth, the child will live till he acquires ſufficient ſtrength to perform the operation of breathing, on which his exiſtence muſt depend when he is ſeparated from his mother.

With theſe views, a looſe warm flannel Cap ſhould be put on the infant's head; and his body, &c. ought to be placed in a baſon of warm water, while the ſkin is to be gently rubbed by the hand of an aſſiſtant. The cord muſt be kept warm by the application of heated flannel.

If, after this treatment has been continued for ſome time, the pulſation in the cord returns, the child may ſoon be expected to breathe; for which purpoſe time alone is neceſſary; for if any attempts be made on theſe occaſions to haſten this important function, the moſt dangerous conſequences may be dreaded.

But when the after-birth is detached, which can be readily diſcovered by every practitioner, or when the pulſation in the

veſſels

veſſels of the navel-ſtring is not ſoon renewed, the operation of breathing can alone preſerve the life of the infant; and therefore the attention ſhould be directed to induce that function.

For this intereſting purpoſe, the cord ought to be tied, and divided in the ordinary manner; and the child ſhould be immediately placed in warm water, before the fire, with his head and ſhoulders raiſed. Air muſt then be thrown into the Lungs, by the introduction of a ſmall pipe or quill into one of the noſtrils, while the other and the mouth are ſhut cloſely. Authors have adviſed the air to be blown in at the mouth; but by ſuch practice the ſtomach will be readily diſtended, which will prevent the lungs from being properly filled. The air ſhould then be gently forced out of the lungs, by moderate preſſure on the breaſt, and again thrown in by the pipe. This imitation of breathing ought to be continued for a conſiderable time, till the heart begins to beat. The child may then be made to gaſp, by any means which can excite a quick ſenſation, ſuch as touching the inſide of the noſtrils with a little brandy,

tickling

tickling the ſoles of the feet, or ſlapping the buttocks.

The exhibition of Scotch ſnuff to the noſe, or of ſtimulating ſubſtances by way of *Lavement*, or the application of the fumes of tobacco, or ſudden expoſure to cold air, may in many caſes prove dangerous expedients; although on ſome occaſions they can be ſucceſsfully employed. They ſhould therefore never be had recourſe to, except every other method has been carefully tried, and has failed.

When by theſe means a child begins to recover, he generally gaſps for ſome time, at conſiderable intervals, before he breathes freely. He ſhould be taken out of the water when he ſhews this firſt ſign of returning life, and put into warm flannel; and all the former attempts ought to be immediately laid aſide.

The ſimplicity of theſe means for reſtoring life to ſtill-born infants adapts them for general uſe; a purpoſe which cannot be accompliſhed by many of the methods lately propoſed, ſuch as the exhibition of Electricity, &c.

Our attempts for the recovery of children

dren in this ſituation ought to be continued for a conſiderable length of time, although they appear unſucceſsful. Many infants have been preſerved from death after they had been deſerted by practitioners.

SECTION II.

RETENTION *of the* MECONIUM.

THE black viſcid ſubſtance, called Meconium, is uſually expelled from the bowels a few hours after the child has been put to the breaſt, if he is ſuckled by his own mother. But ſometimes it is ſo tenacious, that it adheres to the inteſtines, and cannot be thrown off; and ſometimes the milk is not ſufficiently active for that purpoſe.

The impatience of nurſes to get rid of this ſubſtance has often been the cauſe of many dangerous complaints; for the medicines which have frequently been forced on the

the child have induced the moſt alarming complaints.

The retention of the Meconium ought not therefore to be much regarded, unleſs the child is at the ſame time indiſpoſed; but if from any circumſtance he cannot be put early to the breaſt, or is to receive ſuck from a woman who has been ſome time delivered, the common remedy of ſugar and water may be allowed.

When, along with the retention, there are evident ſigns of oppreſſion, of pain in the bowels, or of irritation of the general ſyſtem, then ſome more powerful means to induce the diſcharge ought to be adopted.

Nothing is found to effect this purpoſe better than a ſolution of Manna in water, given in the doſe of a tea-ſpoonful every hour, till it operates; while at the ſame time ſimple *Lavemens*, conſiſting merely of a very ſmall cupful of warm water, ſhould be frequently exhibited.

THE Meconium is in ſome rare caſes retained in conſequence of the natural paſſage being cloſed up; a circumſtance which

which is always attended with much danger, and which requires the immediate assistance of a skilful practitioner.

SECTION III.

ORIGINAL IMPERFECTIONS.

CHILDREN are not always born in a state of perfection with respect to the structure of their bodies; for sometimes they have deficient, superfluous, or misplaced parts, natural passages closed, and marks on various parts.

Many of these imperfections admit of no remedy, while others may be easily rectified.

It would be inconsistent with the nature of this work to describe minutely all the species of malconformation which occasionally occur; and therefore the following observations relate only to those which are met with most frequently.

Children are ſometimes born with blemiſhes about the mouth, which may prevent them from ſucking. Of theſe, Fiſſures in the lips always conſtitute the moſt remarkable deformity.

Theſe imperfections appear in many different forms; for ſometimes the fiſſure exiſts only in one lip, generally the upper one, and is occaſioned merely by a diviſion of the parts. In other caſes, there is a conſiderable loſs of ſubſtance between the divided parts. In ſome inſtances there are two fiſſures in one lip, or both lips are affected; and in others the fiſſure is not confined to the lips, but extends along the roof of the mouth. All theſe different ſpecies of the ſame deformity receive the general name of *Harelip*.

The treatment of the Harelip muſt be varied according to many circumſtances, which can only be determined by an experienced practitioner. If the child can ſuck, the operation by which alone the blemiſh can be removed, ſhould be deferred till he be four or five months old, as then the parts will be better adapted for retaining the pins by which the cure is accompliſhed.

ed. But when ſucking is prevented, the operation ought to be had recourſe to as ſoon as poſſible.

The Tongue, it was formerly obſerved *, is bound down to the lower part of the mouth, by a membranous cord, to prevent it from too great a degree of motion. Sometimes, however, the cord fixes it ſo much, that the infant cannot ſuck; in which caſe he is commonly ſaid to be *Tongue-tied.*

Women very often imagine that their children have this defect when it does not really exiſt; and perhaps one inſtance of it does not occur in ſeveral hundreds of thoſe who are born.

The diſeaſe may be always readily diſcovered by putting a finger gently into the child's mouth; for if he is able to graſp it as he would do the nipple in ſucking, or if the tip of the tongue appears diſengaged, the membrane does not require being cut.

* Page 38.

The operation of *cutting* the tongue, though very ſimple, may prove fatal, if the ſurgeon is inattentive; for ſo great a quantity of blood has often been loſt as to deſtroy the infant.

WHEN the Tongue is not bound down ſufficiently, the tip may be turned back, and cloſe up the throat; an accident which muſt ſoon occaſion death. It may be diſcovered by the threatening ſuffocation, or convulſions, and by the introduction of the finger into the mouth. The melancholy conſequences of this diſeaſe can only be prevented by pulling back the tongue, or exciting vomiting by tickling the throat.

IF the infant cannot ſuck, although the tongue appears to be in a natural ſtate, weakneſs of the lower jaw, thickneſs or ſwelling of the glands in the under part of the mouth, or ſome defect about the nurſe's nipple, may be ſuſpected.

THE natural paſſages of children are ſometimes ſhut up, and prevent the uſual

excretions.

excretions. This will be known by examining the cloths. In ſome caſes ſlime alone proves the obſtacle; but in others membranous ſubſtances cloſe up the paſſages.

In every inſtance where any thing uncommon is obſerved, the child ſhould be carefully examined by a ſkilful practitioner, that the proper means for affording relief may not be too long delayed. In ſome rare caſes, it unfortunately happens that no aſſiſtance can be given.

INFANTS are ſometimes born with deformities in the lower extremities, ſtyled *Club-Feet*. Theſe often become very troubleſome at a future period of life, and are always very juſtly conſidered to be great blemiſhes. Every parent, therefore, is intereſted in their removal.

The griſtly ſtate of the bones of the foot renders a cure in moſt caſes practicable, when the proper means are begun immediately after birth; but if the deformity is not diſcovered till the infant is ſome months old, it will be difficult and precarious.

precarious. Practitioners ſhould, therefore, carefully examine every part of new-born children, that they may not, by any neglect, render their future lives uncomfortable.

The method by which this diſeaſe can be removed is very ſimple. It ſhould conſiſt in the application of proper means to reduce the foot, in the moſt gradual manner, to its natural ſituation. Theſe ſhould not be continued only till this is effected, but ought to be kept applied conſtantly for ſeveral weeks after, in order that the deformity may be completely removed.

SEC-

SECTION IV.

INJURIES *in conſequence of* BIRTH.

WHEN the child has been detained a long time in the paſſage, he is liable to a variety of complaints, according to the ſituation in which he was placed.

THE moſt common of theſe are ſwellings on the head, or alteration of the ſhape of that organ.

Firſt children are generally born with ſome degree of ſwelling on the crown of the head. This, however, uſually diſappears in a few days, and requires no other treatment than the ordinary means employed by the nurſe, viz. rubbing very gently a ſmall quantity of weak ſpirits on it.

But when the tumour continues for two or three weeks, cloths dipped in Lime-

water

water ſhould be applied to it, which will at leaſt prevent officious attendants from uſing more hazardous remedies.

On ſome occaſions, theſe ſwellings contain a fluid, which it has been propoſed ſhould be evacuated, otherwiſe the bones of the head may be injured. But theſe caſes muſt be truſted to the care of a ſkilful practitioner.

ALTHOUGH the ſhape of the Head be much altered, in conſequence of long-continued preſſure during the paſſage of the child, it will ſoon recover the natural form, without any aſſiſtance. The practice, therefore, of endeavouring to give the head a proper ſhape, by ſqueezing and preſſing it with the hands, &c. is unneceſſary, and ought never to be allowed, on account of the dangers which may be the conſequence.

Scratches on the head, like the marks cauſed by a whip-cord, frequently occur after tedious or difficult labours; but they require no particular attention, as they ſoon diſappear.

IN ſome caſes, where the child has come down

down in an unuſual direction, the Face is much affected; for the eyes are inflamed, the noſe flattened, the lips ſwelled, the features diſtorted, and the colour of the countenance livid. Theſe frightful appearances uſually go off in a few days, when no violence has been done by improper interference during the delivery.

Other parts of the child than thoſe already mentioned are likewiſe liable to ſwelling and diſcoloration from the ſame cauſes; but as they ſeldom prove troubleſome, little management is neceſſary.

The Limbs of the infant are in ſome caſes fractured or diſlocated by the raſhneſs and aukwardneſs of the practitioner. Theſe accidents, on ſome rare occaſions, unavoidably happen from the ſituation of the child; but are moſt frequently to be attributed to ill-directed attempts to accompliſh the delivery.

From whatever cauſe theſe diſagreeable occurrences originate, they ſhould never be concealed from the attendants, in order that the proper means may be adopted to remedy them. Many children

have been rendered lame for life from the practitioner by whom they were brought into the world having allowed a diſlocated or fractured limb to paſs unobſerved, to cover his own aukwardneſs.

SECTION V.

Ulcerations *and* Excoriations.

THE common method of treating the navel is ſo univerſally underſtood, that it requires no particular deſcription in this work. The portion of cord which is left next the child drops off within five or ſix days after birth, and leaves a tenderneſs, which is generally entirely removed in two or three weeks, by the ordinary means which nurſes employ.

But ſometimes, whatever precautions be uſed, a rawneſs round the edges, or degree of ulceration, remain, and prove very difficult of cure.

As

As the moſt unfortunate conſequences have often been occaſioned by neglect in ſuch caſes, and as a great variety of treatment will be neceſſary under different circumſtances, a ſkilful practitioner ſhould always be conſulted.

From the delicate ſtructure of the ſkin of infants, excoriations readily take place wherever one part of it is in conſtant contact with another, unleſs the moſt careful attention be paid to keep every part dry. The ears, neck, armpits, and groins, are chiefly liable to be affected in this manner.

When the excoriations are not allowed to continue for a conſiderable length of time, they ſeldom require any other treatment than being duſted, morning and evening, with prepared Tutty, or Calamine, or with common aſhes, finely powdered.

But when a diſcharge of matter is the conſequence of neglected excoriations, a cure can only be obtained by much care and attention; for it is often very difficult to ſtop theſe runnings.

Some practitioners have objected to ſuch attempts, on the falſe ſuppoſition, that the diſcharge is a ſalutary outlet for an overload of the ſyſtem. Theſe opinions, admirably well calculated to favour the careleſſneſs of nurſes, are founded on improper views of the operations of nature.

Many different remedies will be found beneficial in different caſes; ſuch as, waſhing the excoriations daily with Brandy and water, Lime-water, a weak ſolution of Sugar of Lead *, or of White Vitriol, and dreſſing them with Spermaceti Ointment, or Turner's Cerate, thinly ſpread on linen.

While theſe means are purſued, the bowels ſhould be kept open, by the occaſional exhibition of any gentle laxative, as Manna diſſolved in water, &c.

* For the manner of preparing this, ſee Note, p. 110.

SEC-

SECTION VI.

RUPTURES.

RUPTURES in different parts, eſpecially at the Navel, are very common complaints among infants; but are fortunately not attended with ſo much danger as ſimilar diſorders in grown people.

In ſuch caſes, Bandages are in general inadmiſſible, from the difficulty with which they are retained, and the delicacy of the parts on which they muſt neceſſarily preſs. Where the diſeaſe is confined to the Navel, however, a broad piece of flannel, in the form of a roller, by affording a ſafe and firm ſupport, will be found uſeful.

In proportion as the child acquires ſtrength, theſe troubleſome complaints diſappear. Nothing is more conducive to this than

than the continued uſe of the cold bath, as already recommended.

Great attention ought conſtantly to be paid to the ſtate of the Belly of thoſe who are ſubject to Ruptures, as coſtiveneſs always aggravates the diſeaſe.

SECTION VII.

SWELLING *of the* BREASTS.

NEW-born Infants, of both ſexes, are liable to an accumulation of a *Milky-like* fluid, in the breaſts, which often produces painful ſwellings and inflammation. Theſe are frequently relieved by the ſpontaneous diſcharge of the fluid.

The uneaſy ſenſations occaſioned by theſe ſwellings ſeldom continue above a few days, and generally are removed by bathing the parts with warm milk and water, or rubbing them very gently with warm Olive oil, evening and morning.

Emollient

Emollient poultices are rarely neceſſary; but ſhould be applied when the ſwelling and inflamation are conſiderable.

The unnatural but common practice of forcibly ſqueezing the delicate breaſts of a new-born infant, by the rough hand of the Nurſe, is the moſt general cauſe of inflammations in theſe parts. The conſequence of this practice is often ſuppuration and abſceſs; and hence, beſides the hazard of diſagreeable marks in the boſoms of girls, the future woman may be prevented from ever fulfilling the duties of nurſing. Parents cannot therefore be too careful in watching againſt this unnatural and improper cuſtom.

CHAP.

CHAPTER III.

COMPLAINTS WHICH OCCUR MOST FREQUENTLY WITHIN THREE OR FOUR MONTHS AFTER BIRTH.

THE diſeaſes incident to children hitherto enumerated are ſo diſtinctly marked, that they are obvious to the moſt ſuperficial obſerver; but ſome of thoſe included in this and the ſubſequent chapter can only be diſtinguiſhed by ſymptoms which may be overlooked by the attendants.

The improper idea, that the knowledge of the nature of diſorders incident to infancy is merely conjectural, may perhaps be attributed to this circumſtance.

Although children cannot deſcribe their complaints, as grown perſons do, by words; yet an attentive obſerver will find them perhaps more accurately pointed out by

by natural ſigns than they could poſſibly be by language.

The cauſes of infantile diſeaſes have been hitherto traced by authors and practitioners to a few ſources only, ſuch as, a prevailing acid in the ſtomach, great irritability of the ſyſtem, &c. But although a fondneſs for ſimple views of the operations of Nature has long impeded the progreſs of medical knowledge, it is to be hoped, that ſuch prejudices will ſoon ceaſe, and that the effects which any derangement of one part of the human body muſt produce on other parts may be more fully underſtood than they are at preſent.

All the diſeaſes included in this chapter, except the Small Pox, commonly occur within three or four months after birth. The reaſons which render Inoculation often adviſable at that period are explained fully in the ſection on that ſubject.

SECTION I.

Sore Eyes.

CHILDREN, a few days or weeks after birth, are ſubject to Sore Eyes, which not only render them fretful and uneaſy, but ſometimes alſo induce diſagreeable blemiſhes if neglected, or even almoſt total blindneſs.

This complaint is often occaſioned by the imprudent expoſure of the infant to large fires or much light. It is alſo frequently cauſed by cold; and when it occurs in a more advanced period of life, it may originate from teething.

The mildeſt ſpecies of this diſeaſe appears under the form of an encreaſed ſecretion from the eye-lids, which ſeems to gum or glue them together, and which becoming hardened, muſt occaſion conſiderable uneaſineſs.

The

The cure of this complaint consists in guarding against exposure to large fires or much light, and to cold, and in bathing the eyes morning and evening with a little warm milk and water, and twice or thrice through the day with the weak solution of Sugar of Lead, diluted by the addition of an equal quantity of Rose-water.

But when the Eyes, and their appendages, are so much swelled that the infant cannot open them, if a violent inflammation has taken place, succeeded by the constant discharge of matter, the eye may be completely destroyed, if proper assistance is not had recourse to.

As the treatment in such cases must necessarily vary according to circumstances, it cannot be detailed in this work.

When children are affected with a habitual *weakness* of the eyes, the cold bath, and frequent exposure in the open air, afford the best means of relief.

SECTION II.

RED GUM.

INFANTS are much ſubject to *Eruptions* on the ſkin, which aſſume a variety of appearances, and proceed from many different cauſes. The moſt harmleſs of theſe is the RED GUM. It appears frequently a ſhort time after birth, and occaſionally recurs during the period of nurſing.

The Red Gum occurs moſt commonly in the form of a great many ſmall diſtinct red pimples, which can be felt above the ſkin; but ſometimes theſe have a yellowiſh or pearly colour. The eruption is often general over the whole body, like the Meaſles; in other caſes, it appears only on the Face, or Extremities, and is frequently confined within large patches.

The infant does not ſeem to ſuffer any uneaſineſs, or derangement in his uſual functions,

functions, from this eruption; a circumstance which sufficiently distinguishes it from the Measles.

The cause of the Red Gum has been imagined to be an *Acrimony* in the system, which Nature thus throws off. The proofs, however, usually adduced in confirmation of this opinion, do not appear to be very satisfactory; perhaps the cause may be found to proceed from errors in the management of infants with respect to cloathing, air, exercise, &c.; for every attentive practitioner may observe, that children who are cloathed very warmly, and those who are not often in the open air, and who sleep in crowded rooms, &c. are more subject to this eruption than others.

The common practice, therefore, of treating the Red Gum as a complaint of no consequence, is certainly founded on improper views; for although it is a proof of the good health of the child, it is only a *negative* one; for it shews, that the constitution of the infant possesses a power to counteract the effects of mismanagement.

Practitioners, for these reasons, who are consulted

confulted in cafes where children are very much fubject to the Red Gum, fhould inquire very carefully into every circumftance refpecting their treatment with regard to cloathing, air, exercife, fituation during the night, &c. as well as the diet, that the proper means for obviating the caufes of this complaint may be adopted.

When the Red Gum fuddenly recedes, if the child appears much oppreffed, the warm bath is neceffary.

SECTION III.

Yellow Gum.

The Yellow Gum is a difeafe which requires much more attention than the Red Gum, as it is frequently fatal.

The appearance of children affected with this complaint at once points out the nature of the diforder. They are yellow over the whole furface of the body; and the fame colour is obferved in the eyes.

In

In ſome caſes, no ſymptoms but the yellow tinge indicate any thing uncommon; but on other occaſions, the great derangement in the natural functions of the infant prove inconteſtibly that the whole ſyſtem is in diſorder.

The cauſes of the Yellow Gum are various and numerous; a circumſtance which, it may be eaſily explained, depends on the particular ſtructure of children.

The bile, it has been remarked *, is conveyed from the liver and gall-bladder, by a ſingle conduit, into the inteſtinal canal a little below the ſtomach. Any obſtacle which may prevent the paſſage of the bile in this manner, will induce a yellowneſs of the ſkin, &c. termed *Jaundice*. In grown people, the liver is pretty well defended from external injuries; but in infants, it has been obſerved †, it is larger in proportion, and not ſo well protected. The inteſtinal canal in them alſo is more readily deranged than afterwards: hence the flow of bile in children may be inter-

* Page 65.   † Page 398.

rupted by external preſſure on the liver, by diſtenſion of that portion of the inteſtine into which the bile paſſes, or by any of the cauſes which occaſion the ſame accident in grown perſons. The retention of the meconium, it has alſo been alledged, is a very frequent cauſe of this diſeaſe; but may it not rather be conſidered to be merely a conſequence of the particular ſtate of the ſyſtem which induces the Yellow Gum?

There is no doubt that this complaint is often occaſioned by the nurſe's milk. This may proceed from its not proving ſufficiently laxative, or from other circumſtances which have not yet been clearly explained.

The ſymptoms of this diſeaſe vary as much in different caſes as the cauſes; for ſometimes the child is unable to ſuck, ſleeps conſtantly, and all his functions appear to be ſuſpended. In other caſes, the moſt violent cholic pains, or frightful convulſions, are occaſioned; and ſome infants have a yellow tinge over the whole body, which is attended with no inconvenience.

The

The mode of cure of the Yellow Gum muſt be regulated by the ſymptoms and cauſes of the diſeaſe; and therefore cannot be minutely deſcribed in this work.

When the child ſeems to ſuffer no uneaſineſs, although his ſkin is quite yellow, if his bowels be open, it would be abſurd to preſcribe any medicines.

But if he is unable to ſuck, and has a diſpoſition to conſtant ſleep, then the moſt active means ſhould be adopted, otherwiſe the diſeaſe may ſoon prove fatal. Vomits, conſiſting of a grain or two of Ipecacuan, rubbed finely with a little ſugar and water, and briſk laxatives, as a tea-ſpoonful of Caſtor Oil every hour or two, will then be found neceſſary; and their effects may be much promoted by the warm bath.

If the infant is nurſed by a woman whoſe milk is old, a change of nurſe will, in many caſes, alone cure the diſeaſe.

When violent cholic pains or convulſions accompany the Yellow Gum, a ſkilful practitioner ought to be immediately ſent for, as it requires a great deal of judgement to determine the proper means

which on ſuch occaſions ſhould be employed.

SECTION IV.

THRUSH*.

THE THRUSH is ſo common a diſeaſe in early infancy, that many have imagined it to be a ſalutary effort of Nature to expel ſome hurtful matter from the ſyſtem, which might otherwiſe be productive of many complaints at a future period. This opinion, however, is merely a vulgar prejudice, neither founded on reaſon nor experience.

As the Thruſh is in ſome caſes very mild, and in others very unfavourable, the ſymptoms and danger attending the diſeaſe vary on different occaſions.

This complaint appears in the form of

* This is termed, in medical language, APHTHÆ.

ſmall

ſmall white ſpots on the corners of the lips, tongue, and inſide of the cheeks and throat, reſembling little pieces of coagulated milk. Theſe ſpots begin in the mouth, and gradually ſpread over the lips, palate, &c.; and it has been alleged with apparent probability, that in ſome caſes they are continued from the gullet through the ſtomach, and whole tract of the inteſtinal canal.

When the diſeaſe is favourable, the ſpots are few in number, and are confined to the mouth; and the child ſeems to ſuffer little inconvenience from them.

But in the more malignant ſpecies of Thruſh, the ſpots are ſo cloſe and numerous, that they run into each other, forming one uniform tenacious cruſt, covering the whole mouth, palate, and throat; and hence they render the infant incapable of ſucking. In ſuch caſes, before the ſpots appear, the child is generally much depreſſed, and diſpoſed to ſleep; his pulſe is almoſt imperceptible, his extremities cold, and he appears at the point of death. When the ſpots are perceived, the pulſe gradually riſes; feveriſh heat, and encrea-

ſed action of the blood-veſſels ſucceed, attended with great reſtleſſneſs; and the mouth becomes ſo tender, that the infant is incapable of graſping the nipple, or of ſwallowing the mildeſt food; and in making the attempt, his mouth often bleeds immoderately, or fits are induced.

In the progreſs of this diſeaſe, the ſpots change their appearance conſiderably. In favourable caſes, they gradually become yellow, and the intermediate parts have generally an inflamed red colour; but when the diſeaſe is of the malignant ſpecies, the ſpots have a purple or livid hue, which commonly terminates in a gangrenous or mortified appearance.

When the Thruſh is to be conſidered as a diſeaſe, it is uſually preceded or attended by complaints in the ſtomach and bowels, as vomiting, cholic, and violent looſeneſs.

The nature of this diſorder is different in different caſes. When the infant ſuffers little uneaſineſs except what proceeds from the ſoreneſs in the mouth, it may be looked upon as a local diſeaſe, induced by ſome irritation applied to the de-

licate

licate parts which are affected, as very warm ſpoon-meat, &c.

But when diſorders in the ſtomach and bowels, or feveriſh ſymptoms, precede or accompany the Thruſh, it may then be conſidered as the effects of a general derangement of the ſyſtem; and its termination may be expected to be more or leſs favourable, according to the degree of ſtrength which the infant has, and to the violence of the attending ſymptoms.

The remote cauſes of the Thruſh are various, as improper nouriſhment *, confinement in impure air, in ſome caſes ſpecific contagion, and expoſure to cold or moiſture.

THE means of cure in the mild ſpecies of this complaint, although ſimple and obvious, require ſome attention; for as the ſpots are quite ſuperficial, they may be readily removed by the application of any aſtringent medicine; but if they are forced

* Children who are brought up by the hand, as it is called, are very much ſubject to this diſeaſe; and in them it often proves fatal.

off

off prematurely, a fecond crop, in greater quantity, more obftinate in duration and more deeply feated, will fucceed; and if the fame improper treatment is repeated, a new feries of fpots will invariably recur, attended with increafing violence, in proportion to the frequency of repetition.

No aftringent lotion or powder ought therefore to be employed, till the fpots change from white to a yellow colour, when the common remedy of Borax, mixed with fugar or honey *, may be fafely allowed.

The ordinary practice of wafhing the fpots with a rag-mope is always productive of bad confequences.

It is in this fpecies of the complaint alone that a folution of currant-jelly, in water, or fyrup of rofes, with fpirit of vitriol, &c. are admiffible. Bad confequences often follow the indifcriminate ufe of jelly and chalk, which many prefcribe.

In the treatment of the malignant kinds

* viz. In the proportion of an eighth or fixteenth part of Borax, powdered, to one of fugar or honey.

of Thrush; the great object to be aimed at should be, to support or restore the strength, and to correct the disorders in the stomach or bowels.

With these views, when the infant cannot suck, he should be fed with weak beef-tea; and thin panada with a small proportion of wine, or beef-tea with a little bread broke down in it, ought to be given, by way of *Lavement*, every three or four hours. In the most malignant species of the disease, Peruvian bark, in decoction, or mixed with thin starch, should be exhibited frequently in the same manner.

Blisters applied to the back and legs, in succession, are useful in some cases.

For the purpose of correcting the disorders in the stomach and bowels, gentle vomits will sometimes be necessary; and when the stools appear green, and have a sour smell, Magnesia and prepared Crabs Eyes, in the forms recommended in the Appendix, must be prescribed.

When the stools are very loose, have the appearance of dirty water, or are fetid, doses of Laudanum, proportioned to the

the age of the infant, muſt be given from time to time.

The particular ſtate of the ſyſtem in theſe caſes often renders the fluids in all the paſſages highly irritating, which tends much to aggravate the complaint. To remedy this, ſome means ſhould be uſed, ſuch as putting into the mouth, from time to time, a tea-ſpoonful of thin mucilage of Gum Arabic, or of liquor prepared with the white of an egg, beat up with a little water and ſugar, to which a ſingle drop of Oil of Aniſe may be added.

In theſe caſes, nothing ſhould be applied to the ſpots, till they become yellow, and the ſtrength of the child be reſtored.

When there is reaſon to conſider the milk of the nurſe to be the exciting cauſe of the Thruſh, ſhe ought to be immediately changed.

The nipples of the nurſe will be often injured by the ſore mouth of children, if they are not defended with a little mucilage before the infant is allowed to ſuck, and waſhed with weak Brandy, or ſpirits

and

and water, immediately after he is taken off the breaſt.

SECTION V.

BOWEL COMPLAINTS.

CHILDREN, from the delicate ſtructure of their digeſtive organs, are much ſubject to diſorders in the bowels, which frequently aſſume the moſt alarming appearances.

Nature has very fortunately rendered the ſtomach of infants ſo irritable, that when it is overfilled, or loaded with indigeſtible ſubſtances, vomiting is uſually induced; but as habitual vomiting gradually impairs the vigour of the ſtomach, every precaution which can be ſuggeſted ſhould be employed to guard againſt the cauſes of this complaint.

For this reaſon, children, as has been already

ready adviſed *, ought not to be permitted to ſuck too much at a time; and large quantities of ſpoon-meat ſhould never be given in the early months. The intention of ſpoon-meat at that period is not to appeaſe hunger, but to accuſtom the infant to a gradual change of diet. A ſmall proportion only, therefore, ought to be allowed, till towards the period of weaning; and although it muſt neceſſarily be given when the child is hungry, to induce him to take it, his appetite ſhould never be completely ſatiated.

When the infant appears much oppreſſed, is unable to ſuck, has a heavy eye, and a ſtrong-ſmelling breath, there is reaſon to believe that his ſtomach is diſordered; and therefore, if he does not vomit naturally, a ſimple emetic ſhould be given; and even although he does vomit ſpontaneouſly, in many caſes a ſmall doſe of Ipecacuan † will be beneficial.

After the ſtomach is in this manner emp-

* Page 413.

† For Emetics for children, ſee the Forms of Medicine.

tied,

tied, the contents of the bowels ſhould be evacuated by proper doſes of Magneſia and Rhubarb, or of any other gentle laxative.

INFANTS are liable to COLIC PAINS, which often occaſion the moſt threatening ſymptoms; for in ſome caſes the child ſuddenly cries inceſſantly, or by ſtarts, loſes his colour entirely, has oppreſſed breathing, coldneſs in the extremities, and a variety of other alarming complaints. If in theſe caſes the infant draws up his little limbs to his belly, or wreathes his body, if his belly be ſwelled, and he has a partial looſeneſs, the cauſe of his ſufferings will be readily diſcovered to proceed from Colic.

The delicacy of the bowels of infants renders them affected by the moſt apparently trifling cauſes; and hence many circumſtances induce Colic pains in them. Expoſure to cold, inattention to changing the cloths when they become wet, too great a quantity of ſpoon-meat, too large doſes of Magneſia, a collection of acid ſlime in the ſtomach or bowels, and ſome fault

in the milk, may ſeverally be productive of this complaint.

The cure of Colic is by no means ſo ſimple as many have imagined; for not only the exciting cauſe of the complaint muſt be removed, but alſo the effects which are communicated to the whole ſyſtem from the derangement of the digeſtive organs.

When this diſeaſe proceeds from expoſure to cold, or from the long continued application of wet cloths from careleſſneſs of the nurſe, the infant ſhould be put into warm water up to the arm-pits, and kept there for ten minutes, or a quarter of an hour. He ought then to be well rubbed, till he is quite dry, wrapped in warm flannel, without the intervention of linen, and laid in bed. By this treatment, if the complaint is not complicated with diſordered ſtomach or bowels, the child will ſoon fall aſleep, and awake in perfect health.

The impatience of nurſes induces them

to

to have recourſe to ſpoon-meat whenever the infant is fretful, inſtead of employing other means, which would indeed give them more trouble. The conſequence of this is, that the ſtomach, unable to digeſt it, becomes filled with air and ſour meat. It is therefore painfully diſtended, and the bowels are irritated by the acid contents of the ſtomach paſſing into them.

In ſuch caſes, the cure muſt conſiſt in the exhibition of vomits and gentle laxatives; and after the ſtomach and bowels are emptied, the warm bath, as already directed, will contribute greatly to reſtore to the general ſyſtem its former regularity.

MANY infants have their ſtomach and inteſtines often painfully diſtended with air, where nothing but the mother's milk is allowed them. It has been long the cuſtom to give ſpirits and water, or Carminative medicines, in theſe caſes; but altho' the latter, as a little Aniſe Sugar, &c. may be neceſſary on ſome occaſions, yet the former ſhould be had recourſe to with great reluctance; for by proper exerciſe the proceſs

cess of digestion will be much better promoted than by any artificial means applied to the stomach; and flatulencies will never take place where that important function is duly performed.

Many women, from the best motives, but the most improper views, torment their infants with the frequent exhibition of Magnesia; because that medicine has little taste, they foolishly imagine that it can do no injury. But the operation of Magnesia depends on that substance undergoing a change in the stomach or bowels, which gives it the same properties as the laxative *Salts*; and therefore, if too large a dose of these occasions Colic pains in grown persons, the Magnesia must, when given in too great quantity, produce the same effects in infants.

If the Colic is discovered to proceed from this cause, a tea-spoonful of weak beef-tea should be given from time to time, and a small dose of Laudanum *, by the

* See the proper doses of Laudanum for children in the Appendix.

mouth,

mouth, or by way of *Lavement*, will generally relieve the pain.

The internal ſurface of the ſtomach and alimentary canal is conſtantly lubricated with ſlimy fluids, which defend it from injuries, and accompliſh the digeſtion of the food.

Any irritating ſubſtance applied to the delicate parts which furniſh theſe fluids, increaſes the quantity; and hence the digeſtion is interrupted, becauſe the collection of ſlime prevents the due preparation of the food by conſtantly exciting the action of the organs in which that proceſs is carried on.

Nothing contributes more to increaſe the quantity of ſlimy fluids than the common pernicious habit of giving much Sugar in the meat of children. A little of that ſubſtance is proper and neceſſary; but the meat ought never to be what can be termed *ſweet*; for the taſte of the ſugar ſhould ſcarcely be perceived.

In caſes where ſlime is accumulated in the ſtomach or bowels, it ſoon becomes acid,

cid, and confequently the ftools have a green colour and four fmell.

The cure of Colic originating from this caufe will be effected by the exhibition of what are ftyled *Abforbent* medicines, after the ftomach has been emptied by a vomit. Magnefia, prepared Crabs Eyes, &c. may be occafionally ufed, fingly or united, with thefe views *.

WHEN Colic occurs along with violent fever, and conftipated ftate of the belly, the event will often be precarious. The warm bath, emollient *Lavemens*, gentle laxatives by the mouth, fometimes bleeding with Leeches, and a variety of other means, muft be had recourfe to; but as thefe cafes ought always to be committed to the charge of a fkilful practitioner, it would be unneceffary to detail in this work the particular circumftances which require the ufe of each of thefe remedies.

* For the forms in which Abforbent medicines may be given, fee the APPENDIX.

THE

The milk of the nurſe ſometimes cauſes gripes. The common opinion, that paſſions of the mind affect the ſtate of the milk, ſeems well founded. The obvious cure of this kind of Colic is, to prevent the infant from ſucking when the mind of the nurſe is agitated, and where the gripes are induced, to put him into the warm bath.

Looseness of the bowels in children frequently occurs, independent of Colic, and ſometimes proceeds from the ſame cauſes.

When the health of the infant is not injured by this circumſtance, and what is paſſed has a natural appearance, it is not to be conſidered as a complaint, and is often a ſalutary and critical evacuation.

But when the child becomes emaciated, his fleſh flabby, his colour pale, and his vigour impaired, the looſeneſs, whatever the appearance of the diſcharge may be, ought to be moderated, but not ſuddenly checked.

For this purpoſe, in moſt caſes, a vomit ſhould be firſt exhibited, and then Abſorb-

ents may be given; while at the same time proper precautions are adopted, to prevent the recurrence of the same cause which originally induced the complaint.

When the stools are very watery, of a blackish colour, and having an offensive smell, *Lavemens*, consisting of thin Starch, or Rice gruel, with Laudanum, prove the best palliatives. But in these cases, the disorder frequently continues till the child is exhausted, unless proper attention be paid to his diet. Many delicate puny infants have been saved from threatening death by the use of weak veal or beef tea, given twice a-day, without any bread. Country air and the cold bath are on such occasions highly beneficial.

Astringent medicines ought never to be prescribed to children without the greatest caution, as the worst effects have often followed their use.

From the view thus exhibited of the disorders in the stomach and bowels, to which infants are liable, it will appear evidently, that much judgement is in many cases

caſes neceſſary to diſtinguiſh the ſource of the complaint, and to determine the method of cure; and therefore it is incumbent on parents to pay the greateſt attention to ſuch diſeaſes, and never to delay conſulting a ſkilful practitioner till the general ſyſtem is ſo much deranged as to render his aſſiſtance ineffectual.

SECTION VI.

CONVULSIONS.

THE Nerves in children, it has been obſerved *, are in greater proportion, and more eaſily affected, than in grown people: hence infants are more liable to CONVULSIONS; for as theſe complaints depend on an excitement of the Nervous Syſtem, cauſes which can produce no ſuch effect in adults occaſion it in children.

* Page 395.

Convulſions, at all times alarming and hazardous, originate from many different cauſes, and require a very great variety of treatment: therefore proper aſſiſtance ſhould be always procured in ſuch caſes.

But although it would be inconſiſtent with the deſign of this book to explain minutely the principles on which the cure of Convulſions ought to be conducted, yet it may be of great importance to point out the nature of the diſeaſe, that many of the occaſioning cauſes may be avoided. As the event is often very ſudden, it will alſo prove uſeful to direct the means which may be employed with advantage before the practitioner can be had.——With theſe views the following obſervations are offered.

In ſome caſes Convulſions come on ſuddenly, in others the attack is gradual, and the firſt ſymptoms not eaſily diſcerned by the attendants. In the former, the infant, from being in the moſt perfect health, turns in a moment livid, his eyes and features are contorted, and his limbs and whole frame are thrown into violent agitations. Theſe ſymptoms are ſucceeded by

by a ſuſpenſion of vital powers, as in faintings, from which the child gradually recovers, or which may be fatal. In the latter caſes, the infant ſhews ſome degree of uneaſineſs: he ſuddenly changes colour, his lips quiver, his eyes are turned upwards, and he unexpectedly, as it were, ſtretches himſelf out, or his hands become clenched.

Sometimes the child has a rapid and continued ſucceſſion of violent or trifling fits, and ſometimes they recur at diſtant intervals.

Convulsions in infants are induced by every circumſtance which can affect the nervous ſyſtem in general, or which produces a violent irritation on any particular nerve.

The ſudden repulſion of an eruption, or ſtoppage of an habitual evacuation, confinement in impure air, preſſure on the brain, and the particular ſtate of the body previous to ſome eruptive diſeaſes, as the ſmallpox and meaſles, act in the former way; and irritating ſubſtances applied to the ſtomach or bowels, as improper food or medicines, worms, &c. the Cutting of the

the teeth, as it is termed, and wounds in any ſenſible part, &c. operate in the latter manner.

The neceſſity for the moſt guarded caution in the treatment of children cannot be too ſtrongly inculcated; for on many occaſions the moſt trifling neglect will produce frightful Convulſions. Infants are often ſeized with this diſeaſe, from having received a ſmall quantity of ſpirits and water, or from being permitted to ſwallow improper ſubſtances; and in many caſes the cauſe can be traced to the prick of a pin.

THE danger in every caſe of Convulſion is in proportion to the violence of the fits, and alſo depends on the cauſe which induced them. When they precede eruptive diſeaſes, they generally go off when the eruption appears; and when they occur in conſequence of repelled Raſhes, or ſuppreſſed evacuations, their return is prevented by the eruptions being made to recur, or by the ſubſtitution of artificial diſcharges.

But when the fits are violent and frequent, and when they proceed from preſ-

ſure

ſure on the brain, or any cauſe which tends to keep up the irritation in the ſyſtem, they generally terminate fatally. The ſame event often follows a ſingle fit, by whatever cauſe the diſeaſe is occaſioned; and when one attack has been long continued, and attended with alarming ſymptoms, much may be dreaded from its recurrence.

As the cure of Convulſions muſt be neceſſarily very different in different caſes, it is impoſſible to deſcribe any means which will be ſucceſsful on every occaſion.

When an infant is ſeized with a violent fit, without any previous complaint, he ought to be expoſed freely to the open air, by which he will be commonly recovered.

After this, if his pulſe is ſtrong and quick, blood-letting, by the application of leeches to the feet, will be found uſeful; but if he appears ſick and oppreſſed, loaths the breaſt, or exhibits any ſigns of a diſordered ſtomach, a vomit ſhould immediately be given, and the bowels ought to be opened by an emollient *Lavement*.

IN

In cafes where there are no fymptoms of increafed action of the blood-veffels, nor of any derangement of the ftomach or bowels, the caufe of the fit muft be fearched for, otherwife no probable means of relief can be adopted. For this purpofe, the infant ought to be made quite naked, and placed in the warm bath, while every part of his body fhould be carefully examined, that any wound or other injury may be difcovered.

The precaution of ftripping the child fhould be obferved on every occafion where the caufe of the convulfion is not very obvious, as the fits may originate not only from a fall, which the nurfe endeavours to conceal, but even, as has already been remarked, from the prick of a pin.

Where, from the previous indifpofition of the infant, there is reafon to believe that the convulfions precede fome eruptive difeafe, he fhould be immediately put in the warm bath, after having been expofed for a minute or two to the open air, and then ought to receive from time to time

time ſmall doſes of any gentle cordial *. By theſe means the eruption will uſually ſoon be thrown out, and the child conſequently relieved from the fits; but in ſome caſes a Bliſter on the back or legs muſt be applied before this favourable event can be effected.

THE treatment when convulſions depend on the Cutting of the Teeth, is directed in the ſection on *Teething*.

WHEN a child ſeems to be ſuddenly deprived of life by one or two fits, if he appeared previouſly in good health, he ought on no account to be conſidered as irrecoverably loſt; but the common means for reſtoring ſuſpended animation ſhould be carefully employed as long as his colour is not entirely changed; and in every caſe of apparent ſudden death from this cauſe, they ought to be continued with patient perſeverance for ſome time.

* See in the APPENDIX the proper Cordials for children.

SECTION VII.

SMALLPOX *by* INOCULATION.

THE introduction of Inoculation into Great Britain and other northern parts of Europe may be considered an important æra in the history of medical improvement; and the increasing progress of the practice should be regarded as the most convincing proof of the advantages which have been found to proceed from it.

The Smallpox, it is well known, was a disease of the most alarming nature before inoculation was discovered; for above two thirds of all who were afflicted with it became its victims. It is indeed true, that only perhaps one in four or five of these died; but the rest were either much disfigured, rendered blind, or had complaints in consequence of the disease, which proved the cause of a lingering death.

But

But by inoculation all theſe accidents are prevented; for not above one in a hundred dies, and very few are in the ſmalleſt degree marked.

MANY plauſible objections have been urged againſt this practice, two of which only however require a ſerious refutation. The firſt is, that ſince the introduction of inoculation, the number of deaths having not been diminiſhed, the Smallpox occaſioned by artificial means do not throw off that noxious matter from the habit, which it is ſuppoſed the diſeaſe in the natural way certainly does.

This argument, founded on falſe information, and ſupported by ideal reaſoning which cannot be eaſily overturned by direct proof, has unfortunately appeared too convincing to many people. The irregular manner in which the regiſters of the annual deaths in Great Britain have been hitherto kept, while it firſt gave origin to this objection, ſtill prevents a complete unreſerved refutation of it.

But no experienced practitioner who has attentively obſerved the caſes which have

been under his management, can possibly deny that the mortality of children in all ranks of life has decreased very much within these twenty years; and it must be obvious to every person above fifty years of age, that the beauty of the human race has improved considerably within the same period.

Nature has not surely in vain bestowed on the Countenance of Man that beautiful assemblage of features, which, unless destroyed by disease, serve so admirably to express his passions. In a political view, therefore, every means which can improve the beauty without impairing the health, ought to be encouraged; and hence, were it even proved that inoculation does not lessen the number of deaths, it should be recommended for this purpose.

The other objection, calculated to interest the feelings of every parent, has had much influence in depriving many of the benefits which may be derived from inoculation. A child, it is alleged, may never be infected with the Natural Small-pox; if therefore that disease is artificially induced, should the event prove unfortunate,

nate, the parents have great reaſon to blame themſelves.

But as very few who take any part in the active ſcenes of life, can avoid being expoſed to the contagion of this diſeaſe, it is certainly incumbent on thoſe to whoſe charge the care of infants is intruſted, to adopt the means which Providence has put in their power to protect them from the dangers attending the natural Small-pox. The reflections of parents who do not inoculate their children, compared with thoſe who do, on the ſuppoſition of an unfortunate event in both caſes, will be found of a very oppoſite nature.

The former, having neglected to afford their offspring the proper chance for life, or for the prevention of blemiſhes which may make them miſerable during the whole period of their exiſtence, or may prove the ſource of much future diſtreſs, will unavoidably feel the moſt diſagreeable ſenſations; while the latter, having fulfilled their duty, by taking the moſt effectual method of procuring health and comfort to their children, will enjoy that ſatisfaction which always ſucceeds conſcious

ſcious rectitude of conduct, and will conſequently be conſoled for their loſs.

Inoculation, however, is now ſo univerſally adopted, that theſe obſervations may perhaps appear unneceſſary.

The period of life at which this operation ſhould be performed, is not yet determined by authors or practitioners. Where every circumſtance is favourable, between the third and fourth month after birth ſeems to be the moſt eligible time for inoculating children who are placed in large cities. They have then acquired ſufficient ſtrength to undergo the diſeaſe, and they are not yet troubled with the complaints which attend teething. If it is deferred to a later period, they muſt be continually expoſed to be infected with the Small-pox naturally, if ever ſent into the public ſtreets or walks; or the prevalence of the diſeaſe in the neighbourhood, or the accidental occurrence of it in the family, may render inoculation indiſpenſable, although the infant is not in a proper ſtate for the operation.

But

But when a child cannot be with ſafety inoculated at that period, the firſt favourable opportunity muſt be embraced, even although it ſhould become neceſſary to protract the term of nurſing for a few weeks; for the Smallpox would be dangerous immediately after weaning.

As a conſiderable interval commonly takes place between the appearance of the firſt four teeth and the ſubſequent ones, many children may be inoculated as ſoon as they recover from the effects of cutting theſe.

If this important operation is unavoidably delayed till the infant is weaned, he ſhould be allowed to recruit completely before it be performed.

ONE very important advantage derived from the artificial manner of inducing the ſmallpox, is, that the operator has it in his power to communicate the diſeaſe when the body of the child is in ſuch a ſtate as to be capable of reſiſting the effects of the complaint; if therefore an infant is inoculated when much weakened, or when affected with any indiſpoſition, the

the deſign of the operation will be materially fruſtrated.

The great ſucceſs which in general attends inoculation, has rendered practitioners within theſe few years leſs attentive to the health of the children on whom they operate, than is conſiſtent with their duty or intereſt. To this circumſtance the death of ſome infants under this operation, and the great danger of others, caſes which from time to time occur, may be generally attributed.

The greateſt attention ſhould be therefore paid to the ſtate of a child before inoculation be determined. It is not enough that he *appears* healthy and thriving; for the moſt convincing proofs that he *really* is ſo, ſhould be obtained.

An infant ought on no account to be inoculated whoſe fleſh is flabby, or who has had a long continued bowel-complaint, who has any Raſh on his ſkin, or who does not appear to have as much ſtrength as children of his age and form generally have. Where a cough or feveriſh ſymptoms appear, or where the teeth ſeem to be at hand, no prudent practitioner would think

think of the operation; and the ſame caution ſhould be obſerved where an infant has been expoſed to the contagion of Smallpox or meaſles.

THE method of inoculating is now much more ſimple than formerly; it conſiſts merely in inſinuating the point of a lancet or needle, previouſly dipt in Smallpox matter, between the ſcarf and true ſkin, in one or two points, on the left arm, and retaining it there for two or three ſeconds, that the matter may be taken off the inſtrument, and left.

Many errors are daily committed in this apparently trifling operation. The choice of the *Matter*, though a moſt material object on theſe occaſions, is often injudicious. The vulgar prejudice, that hereditary diſeaſes may be communicated by inoculation, is certainly ill founded; and therefore matter from Smallpox in any caſe may be uſed, unleſs the practitioner wiſhes to avoid the ſmalleſt riſk of being blamed by parents. But ſometimes the *Chicken pox* ſo nearly reſemble in appearance and progreſs the Smallpox, that ma-

ny children have been inoculated with matter from them, have had a diſeaſe ſuppoſed to be what was intended, and have afterwards been infected with the natural Smallpox. Every practitioner therefore ſhould be cautious in the choice of the matter which he employs for inoculation.

Although recent matter always ſucceeds more certainly than what is kept for ſome time, a practitioner ſhould avoid inoculating an infant immediately after he has taken the matter from the infected child, otherwiſe he may communicate the contagion in the natural way. But when from particular circumſtances this precaution cannot be adopted, the child to be inoculated ought to be placed at a window, ſo that a ſtream of air may paſs between him and the operator.

When matter dried on a lancet or needle is uſed, it is cuſtomary to moiſten it by the ſteams of warm water. Care ſhould be taken not to ſoften it too much; for it cannot then be carried on the point of the inſtrument into the ſkin.

Two punctures are generally made, that the operation may not fail; but they ſhould

be

be placed at the diſtance of an inch and a half, or two inches, that if both inflame, they may not become one ſore.

In infants, a drop or two of blood unavoidably follows the punctures, and ſometimes carries away the matter. This accident can be prevented by wiping off the blood gently, and then applying to the wound a little of the matter ſcraped from the lancet. A ſmall piece of court-plaſter ſhould perhaps be put over one of the punctures, to keep the matter from being rubbed off by the cloaths: it may be removed, after twenty or thirty hours, by means of warm water.

THE medicines which many operators obtrude on infants, with the intention of *preparing* them for the Smallpox, are generally unneceſſary, and often hurtful. Nothing with this view but two or three doſes of any very gentle laxative, at the diſtance of three days from each other, ſhould be given. Little alteration in the diet of the Nurſe is ever neceſſary, eſpecially if the mother performs that taſk; but as hired

nurfes ufually indulge in too rich and plentiful a diet, proper reftrictions fhould be enjoined, and a dofe or two of laxative Salts ought to be prefcribed before the eruption is expected.

THE punctures made by the operation begin ufually to inflame on the third or fourth day, and affume a regular fhape, which is an indication that the inoculation has fucceeded; for if it fails, although the fcratch may inflame, yet it cannot be felt hard and prominent, and has no regular form.

On the eighth, ninth, or tenth day, the child fickens, as it is termed. He becomes uneafy, exceedingly fretful, and feverifh. Sometimes he ftarts very much; and in other cafes is feized with convulfions. But thefe fymptoms, if properly treated, are never dangerous, and continue only for a fhort time.

After thirty, forty, or fifty hours, the eruption appears, and continues to come out for three days commonly. The Pox are generally quite diftinct, few in number,

ber, and confined chiefly to the extremities, or to thoſe parts which are uſually next the nurſe, or where there is the greateſt heat.

When the eruption is completely out, all uneaſy ſenſations ſubſide till about the ſixth or ſeventh day, when the puſtules, which had continued to increaſe in ſize from their firſt appearance, become red at their baſe, conſequently ſore, and are gradually filled with matter; during which the infant is again, in moſt caſes, fretful and uneaſy for thirty-ſix or forty-eight hours, when the puſtules having ripened, he is relieved. The Pox then change their colour, firſt on thoſe parts expoſed to the air, the matter is dried up, or the puſtules are blackened, as it is ſaid, and they ſcale off by degrees.

If there has been a copious eruption, the face ſwells during this ſtage, and the infant is blind for two or three days.

The child is ordinarily completely recovered from this diſeaſe between three and four weeks after inoculation.

This is the uſual progreſs of the Small Pox induced by artificial means. But in many

many caſes, a variety in the ſymptoms, and in the order of their occurrence, takes place.

On ſome occaſions, the arm does not inflame till the tenth or twelfth day; the eruption does not appear till the ſeventeenth, eighteenth, or twentieth; and in theſe caſes there is often a ſecond crop on the fifth or ſixth.

When inoculation has been performed on a weakly child, the eruption does not come freely out; or if it does, the puſtules continue flat, and become livid; and ſometimes they are in ſuch quantity, that they run into one another, and the whole body of the infant is covered with them.

The treatment of the favourable Smallpox is well known. When the ſickneſs, &c. begin, the child is kept very cool, and attention is paid to the ſtate of his belly. If threatened with fits, he is expoſed to cold air till recovered, and then put into the warm bath, to promote the eruption. After the puſtules appear, if the infant is no longer uneaſy, he is kept much in the

open

open air, and coſtiveneſs is guarded againſt. When they begin to ſuppurate, the pain is moderated by ſmall doſes of Laudanum; and when they ſcale off, a few doſes of any gentle laxative are preſcribed. If the wound in the arm is very painful, and much inflamed, it is commonly duſted frequently with hair-powder; and in ſome rare caſes, emollient poultices are applied.

WHEN the diſeaſe is violent, and the ſymptoms indicate danger, a variety of treatment will be neceſſary; but that muſt be directed by a ſkilful practitioner. A caution ſhould be given, not to recommend the cold regimen indiſcriminately; for on ſome occaſions moderate warmth, and weak cordials, are of as much importance, as expoſure to cold and the prohibition of every thing heating are uſeful in general.

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CHAPTER IV.

DISEASES WHICH OCCUR BETWEEN THREE OR FOUR MONTHS AFTER BIRTH AND THE PERIOD OF WEANING.

THE diseases included in this chapter do not comprehend every complaint to which infants are liable during the period mentioned; they are only the most common which occur.

As the duty of medical practitioners consists as much in the prevention as the cure of diseases, a few directions respecting the proper method of weaning children, and the age at which that important change should be made, form the last section of this chapter.

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SECTION I.

Milk Blotches *.

A White or dusky scabby eruption, principally affecting the Brow, or some part of the head or face, in many cases appearing in different distinct patches, in others spreading considerably in one continued crust, is known to nurses by the name of Milk Blotches.

These scabs are always superficial; consequently never leave any scar, unless they are improperly treated. They are attended with no fever, or obvious derangement of the system, although they often continue for weeks or months.

Eruptions of this kind generally only occur in gross children, and seem to proceed from

* This complaint is called, in medical language, the Lactumen, or Crusta Lactea.

too rich milk. The cure therefore commonly depends on the abſtinence of the nurſe from much animal food, and from all fermented liquors.

The anxiety which parents and nurſes often expreſs to have theſe ugly appearances removed, has induced many practitioners to interfere unneceſſarily and improperly.

It ſhould always be remembered, that theſe eruptions are critical and ſalutary; and therefore, when from exceſſive itching it becomes neceſſary to apply to them a weak ſolution of Sugar of Lead, the bowels ſhould be opened, and a looſeneſs occaſioned.

Every active medicine, ſuch as large doſes of Sweet Mercury, waters impregnated with Sulphur, &c. ought, if poſſible, to be avoided.

SECTION II.

TEETHING.

INFANTS ſeem to feel a variety of complaints in conſequence of TEETHING. Many ſuffer much leſs than others; but all are affected in ſome degree.

It appears very wonderful, that pain ſhould attend a natural and neceſſary operation; and therefore the circumſtance has been denied. But no reaſoning can overturn matters of fact; for the experience of every nurſe proves, that the moſt vigorous and healthy children feel much uneaſineſs during the period of Teething.

Although infants are ſometimes born with two or four Teeth, theſe generally continue within the Gums, as was formerly remarked *, till five, ſix, or ſeven

* Page 397.

months after birth, when the two middle fore-teeth of the lower, and then, in a few days or weeks, the correſponding ones of the upper jaw appear.

After this an interval of ſeveral weeks commonly takes place, before the remaining fore-teeth, which uſually are cut in the ſame order as the former, ſucceed.

During the ordinary period of ſucking, children ſeldom cut more teeth than theſe; though at the end of the ſecond year they have ten in each jaw.

The ſymptoms which precede and accompany the eruption of the teeth are more or leſs violent, according to the ſucceſſion in which the teething proceeds, to the reſiſtence which the gums make, to the irritability of the infant's conſtitution, &c.

In the moſt favourable caſes, the preſſure of the teeth on the gums occaſions ſome pain, and cauſes an increaſed flow of the fluids furniſhed by the mouth: hence the child is fretful, reſtleſs during the night, frequently thruſts his little hands, or whatever he can get hold of, into his mouth, to rub his gums, ſlavers continually, and from the paſſage of ſome of the ſpittle

ſpittle into the ſtomach and bowels, he has occaſionally ſickneſs, gripes, and looſeneſs.

At laſt the corner of a tooth is perceived; but the uneaſineſs ſtill continues for ſome days, when a ſecond one is cut.

During the interval between the eruption of the lower and upper teeth, the child recovers his ſtrength and uſual good health; but is ſoon again ſubjected to the ſame uneaſineſs.

WERE theſe the only complaints which attend Teething, little danger might be apprehended; but ſometimes, inſtead of theſe, a train of the moſt formidable ſymptoms occurs. In ſtrong robuſt children, a violent fever frequently precedes the eruption of every tooth; the gums are ſwelled and inflamed, the eyes much affected, the belly bound, the ſkin hot; and the infant cries inceſſantly, is unable to ſuck, and never enjoys uninterrupted ſleep for any length of time.

Weakly children, where teething is painful and difficult, are oppreſſed with ſickneſs, loath all kinds of food, loſe their colour, fret perpetually, have a conſtant looſeneſs,

neſs, and become quite emaciated. Irritable infants, under the ſame circumſtances, beſides theſe ſymptoms, are ſubject to convulſions, which recur from time to time, till the tooth or teeth are above the gum.

All the ſymptoms in children of every deſcription are much aggravated, if ſeveral teeth cut at once, or in immediate ſucceſſion; caſes which ſometimes happen.

The treatment of the ordinary complaints attending teething ſhould conſiſt in moderating the pain, in regulating the ſtate of the belly, and in the continued employment of every means which can promote the general health of the infant.

With theſe views, ſmall doſes of Laudanum ſhould be given at bed-time, when the child ſeems greatly pained. He ought to be fed with beef-tea twice a-day, if weakly, and if his bowels be very looſe, and ſhould be kept as much as poſſible in the open air, when the weather is favourable. The cold bath ought never to be laid aſide in theſe caſes, as nothing is more conducive to ſtrengthen the child. Looſeneſs,

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if exceſſive, muſt be moderated, and if the belly is bound, ſhould be artificially induced by gentle laxative medicines.

Children feel an urgent deſire, during Teething, to rub their gums; and, under certain regulations, it may be ſafely indulged. But the common ſubſtances put into their hands for this purpoſe, as Coral, &c. by bruiſing the Gums, may occaſion violent inflammation in theſe parts; and therefore the ſofteſt materials ſhould be ſelected, ſuch as a ſmall piece of freſh Liquorice root, or, as the vulgar employ, a piece of wax candle.

The management where alarming ſymptoms occur is more complicated, as it muſt be varied according to circumſtances.

When fullneſs and quickneſs of the pulſe, increaſed heat, fluſhed face, frequent ſtartings, oppreſſed breathing, immoderate fits of crying, &c. indicate a violent fever, the application of Leeches becomes indiſpenſable; after which the warm bath is uſeful. The belly ſhould be opened by laxative medicines and emollient *Lavemens*; and every means ought to be purſued which can di-

minish

minifh the action of the heart and arteries. In thefe cafes, however, unlefs the irritation on the gums be removed, the feverifh fymptoms often refift every treatment which can be fuggefted.

The moft effectual method to accomplifh this defirable object is, to cut the gum down to the teeth. This fhould be performed with a Lancet, and not by the nails of a nurfe, nor by a fixpenny-piece, as many female practitioners of midwifery advife.

This operation ought never to be delayed, when the infant is feized with convulfions about the period of Teething, even although the protrufion of the gum does not announce the approaching eruption of the teeth. On thefe occafions, the under jaw muft be firft cut; and if, by dividing the gum at that part where the firft teeth commonly appear, the lancet is found to rafp againft a hard fubftance, the removal of the fits will fhew, that the practice has been fuccefsful. But if no teeth are felt, and the convulfions recur, then the upper jaw fhould be cut in the fame manner. I have often known fits which had daily attacked

tacked infants for many weeks, and had reſiſted the power of every other remedy, diſappear entirely after cutting the gums. As no danger can follow this ſimple operation, it ought to be had recourſe to more frequently than practitioners ſeem willing to allow.

When troubleſome cough, ſoreneſs of the eyes, &c. attend Teething, they can ſeldom be perfectly cured, till after the painful ſtage of that proceſs.

As children are always expoſed to much danger when the ſymptoms of Teething are violent, proper aſſiſtance ſhould be had recourſe to; for parents are not capable of directing the management in ſuch caſes.

SECTION III.

INFANTILE FEVERS.

THE feverish complaints which attack children are generally merely symptoms of some other disease. Their duration is seldom considerable; and although violent while they continue, they are not frequently productive of danger, if properly treated.

The causes of INFANTILE FEVERS, therefore, are very numerous. Exposure to cold, disordered stomach or bowels, teething, and, in short, every thing which can excite an increased action in the heart and blood-vessels, readily induce them.

The treatment of these complaints must depend entirely on the causes; and the proper method for remedying most of them has already been detailed.

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When the cauſe of Infantile Fevers, as ſometimes happens, cannot be diſcovered, attention ſhould be paid to moderate the ſymptoms. For this purpoſe, vomits, gentle cordials, the warm bath, or leeches, and bliſters, will be occcaſionally neceſſary.

Parents ought to be encouraged never to loſe hopes of the recovery of children in theſe complaints; for many caſes have occurred, where the diſeaſe terminated favourably, after the moſt eminent practitioners had deſerted them as loſt. The moſt unremitting attention ſhould therefore be conſtantly paid to infants affected with Fever, as long as life continues. When food cannot be given by the mouth, a child may be nouriſhed for many days by *Lavemens*, compoſed of bread-berry and wine, or beef-tea.

SECTION IV.

CROUP.

OF the diſeaſes incident to infancy, the CROUP is perhaps the moſt alarming, for it often proves fatal within thirty-ſix hours from the firſt attack.

This diſeaſe is moſt prevalent in marſhy countries, or in thoſe ſituated in the neighbourhood of the ſea. It occurs more frequently in winter and ſpring than at any other ſeaſon; but thoſe children who have once had it are apt to be affected with it, if expoſed to cold at any time in moiſt weather.

The Croup ſeldom appears in children after eight or nine years of age; but before that period, infants of every age and habit are ſubject to it.

It has been by ſome practitioners ſuppoſed to be contagious; for two or three chil-

dren

dren in the ſame family have fallen victims to it within one week. But this can probably be explained from their having been all expoſed to the ſame exciting cauſe of the diſeaſe.

On ſome occaſions the ſymptoms of the Croup ſteal on by imperceptible degrees; in other caſes they appear unequivocally at once. When the infant feels a difficulty of breathing, attended with a loud noiſe in the throat, which can be heard at a conſiderable diſtance, fluſhed face, and quick full pulſe, the diſeaſe has really commenced; and when a child has a hard hoarſe cough for ſeveral days, during damp weather, the complaint may be with reaſon dreaded.

This diſeaſe is attended at firſt with ſymptoms of violent inflammatory fever; but theſe diſappear in a few hours. The pulſe then becomes very quick and feeble, and the face pale and ghaſtly. The loud hoarſe breathing ſtill, however, continues, and does not ceaſe till a few minutes before the child ſinks.

The ſymptoms of the Croup, and appearances after death, plainly ſhew, that it

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is occaſioned by a local affection of the wind-pipe, which firſt impedes and then prevents reſpiration.

The moſt active means for the cure of this dangerous complaint ought to be employed without a moment's delay. Leeches, vomits, the warm bath, and bliſters, are found to be the beſt remedies.

Unleſs Leeches are applied at the beginning of the diſeaſe, they always prove hurtful. Vomits after the blood-letting are commonly ſerviceable; and the warm bath ſeems to promote the good effects of both theſe means. Although bliſters are only neceſſary where the complaint has not yielded to the former treatment; yet, as the Croup is never to be trifled with, a bliſter ſhould always be applied to the throat, breaſt, or back, after the infant is taken out of the warm water.

In ſome caſes, other expedients may be adviſed; but theſe muſt be directed by a ſkilful practitioner.

When irritable weakly children are ſubject to occaſional attacks of the Croup, vomits and the warm bath afford the beſt means

means of relief; and the moſt prudent caution to avoid expoſure in damp weather ſhould be recommended.

SECTION V.

DIRECTIONS *reſpecting the* METHOD *of* WEANING CHILDREN.

WEANING forms an important æra in the life of an infant, as on the proper regulation of this great revolution in his mode of living his future health often depends.

Although different countries adopt different practices with reſpect to weaning; yet it is a rule almoſt univerſally eſtabliſhed, never to deprive a child of the breaſt if he does not thrive, unleſs his indiſpoſition ſeems to originate from the milk. This is not an uncommon occurrence; for when women give ſuck too long, a natural change takes place in their ſyſtem, which renders the

the milk no longer poſſeſſed of qualities proper for nouriſhment.

The period of Weaning muſt be influenced by a variety of circumſtances beſides the health of the child, as ſeaſon of the year, and conſtitution of the parents. The winter, for obvious reaſons, is a very improper time for this purpoſe.

When the parents have a ſcrophulous habit, the child ſhould be ſent to a healthy country-woman, as already recommended *; and he ought not to be weaned till at leaſt eighteen months old. If the nurſe becomes unfit for her duty before that time, another ſhould be procured.

With theſe exceptions, infants may in general be weaned at any time between nine and twelve months after birth. Too early and too late Weaning ſhould be equally guarded againſt.

MANY errors are daily committed in the method of weaning children. Some women deprive the infant of the breaſt at

* Page 411.

once,

once; and others, by the application of muſtard, or any nauſeous ſubſtance, to the nipples, endeavour to make him deſert the breaſt of his own accord.

Both practices are equally cruel and improper. A change in diet ſhould be introduced by degrees; and therefore, for ſeveral days previous to weaning, the child ought to receive an increaſed quantity of ſpoon-meat, and ſhould be allowed a ſmaller proportion of milk. But unleſs the latter precaution be attended to, the former practice ought not to be adopted.

When an infant is weaned, it is too common for nurſes to give doſes of Laudanum, or Syrup of Poppies, (which has the ſame effects), every night for a conſiderable time, with the plauſible view of obviating reſtleſſneſs. But except for the firſt night or two, theſe medicines ſhould never be allowed. The indiſcriminate uſe of Laxatives is alſo a prevalent cuſtom among women, and cannot be condemned in ſtrong enough terms. If the bowels are not ſufficiently open, laxatives muſt be had

recourſe to; but otherwiſe they ought not to be preſcribed.

THE infant ſhould be accuſtomed, when weaned, to receive food or drink at ſtated periods, and not according to the caprice of nurſes. Although this taſk will at firſt be ſomewhat difficult, it can always be accompliſhed by perſeverance; and the benefits which the child himſelf, and his attendants, will certainly derive from this circumſtance, will more than compenſate for the trouble attending the attempt. No drink or food ought to be given during the night; for a bad habit would be induced, which might lay the foundation for many future complaints.

The impropriety of indulging infants with ſpirits and water, wine-whey, &c. has already been fully explained.

AFTER weaning, the food of children ſhould conſiſt of weak beef-tea, panada, light puddings, and the various preparations of milk. Ruſk biſcuit ought always to be uſed, inſtead of ordinary bread.

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The common preparation of oat-meal, (called pottage or porridge), till within theſe few years much uſed in this part of Great Britain, is undoubtedly too difficult of digeſtion for infants.

Frequent expoſure in the open air when the weather is favourable, and an increaſed degree of exerciſe, are highly beneficial to newly-weaned children.

APPENDIX.

FORMS OF MEDICINES.

Observations on the DOSES *of* MEDICINES.

MEDICAL practitioners commonly prescribe liquid medicines in the doses of *table-spoonsful*, *tea-spoonsful*, or *drops*. But an exact dose can never be given by these measures; for table and tea spoons are very various in size; and fluids poured from a phial fall out in large or small drops, according to the thickness of its edges or to the quantity of its contents.

The doses of medicines recommended in this Work are regulated by a graduated glass-measure, which every family can procure for

a trifle. A Table Spoonful is ſuppoſed to contain Half an Ounce, a Tea Spoonful, a Drachm, and the latter is conſidered to be equal to ſeventy drops. When therefore any medicine is regulated in the doſe of ten drops, a drachm may be diluted with ſeven times the quantity of water, and a tea-ſpoonful will furniſh the exact proportion; and the ſame rule may be applied to every other doſe of fluids by drops.

The doſes of the Pills are always ſpecified.

The doſes of Powders and Electuaries ſhould be aſcertained by Weight, for which purpoſe every family ought to be provided with a ſet of Apothecaries Weights.

The doſe of each medicine proper for grown perſons and alſo for children is added to each *Form.*

ABSORBENTS. *

MAGNESIA.

It may be mixed with water or milk.

The doſe for grown perſons is half a drachm every four or ſix hours, when neceſſary; for children, twenty grains once in eight or ten hours.

PREPARED CRABS EYES.

It may be given in the ſame manner as Magneſia.

The doſe for grown perſons is fifteen or twenty grains every hour or two; for children ten grains every two hours.

LIME-WATER.

The doſe for grown perſons is a tea-cupful twice or thrice a-day; for children two tea-ſpoonsful or a table-ſpoonful, (according to their age), diluted with common water.

* When any of the following medicines is ſuited both to grown perſons and children, the doſes proper for each are mentioned; but when they are only deſigned for one or other, the doſe for either alone is marked.

ABSORBENT MIXTURE.

Take of Refined Sugar one drachm,
Prepared Crabs Eyes,
Magnefia, of each two drachms.

Rub them well together into a fine powder. Then add

of Simple Cinnamon-water two tea-fpoons-ful,
Common water five table-fpoonsful.

Dofe: For grown perfons a table-fpoonful, and for children a tea-fpoonful, every two hours *.

ANODYNES.

OPIUM.

Dofe, One grain for grown perfons.

OPIATE PILLS.

Take of Pure Opium, and
Powder of Cinnamon, equal parts.

Form thefe, by means of Syrup, into pills of one grain each.

Dofe for grown perfons, Two at bed time, and in particular cafes one in the morning.

* This mixture fhould be kept in a phial in a cool place, and the glafs ought to be well fhaked every time it is ufed.

LAU-

LAUDANUM.

Dose for grown persons, Thirty or thirty-five drops once in twenty-four hours. When it disagrees in the ordinary quantity, it may often be given with much advantage in doses of five drops every hour till the proper effect be produced.

The dose for children must be varied according to their age. One drop is quite enough at any time during nursing; half a drop is the proper dose for several weeks after birth *.

When Laudanum is prescribed by way of *Lavement*, the proportion must be more than double what can be given by the mouth.

PAREGORIC ELIXIR.

Dose for grown persons, Seventy drops in a cup of water or gruel.

RUSSIAN CASTOR (in fine Powder).

This medicine must be always used fresh powdered.

The dose for grown persons is fifteen or

* The author has been consulted in two cases where four drops proved fatal to children some months old.

twenty grains once in twenty-four hours, given in marmalade or jelly.

ANODYNE DRAUGHT.

Take of Laudanum thirty-five drops,
Common Syrup two tea-ſpoonsful,
Simple Cinnamon-water a table-ſpoonful.
Mix them together.

This medicine, to be taken at once, is only adapted for grown perſons.

ANODYNE MIXTURE.

Take of Laudanum one drachm,
Tincture of Saffron a table-ſpoonful,
Common Syrup two table-ſpoonsful,
Water two ounces.
Mix them together.

Doſe, two table-ſpoonsful at bed-time, and one every five or ſix hours while pained, for grown perſons.

OPIUM PLASTER.

To two ounces of the Stomach-plaſter of the London Diſpenſary, add two drachms of Pure Opium.

To be ſpread on a piece of leather, and uſed as directed p. 185.

ASTRIN-

ASTRINGENTS.

For Internal Use.

OAK BARK (in Powder.)

Dose, twenty grains twice a-day, for grown persons, in jelly or marmalade.

PERUVIAN BARK.

Dose, a tea-spoonful twice a-day, for grown persons, in water, port-wine, in jelly, or in a piece of sheet-wafer.

ELIXIR OF VITRIOL.

Dose, ten or fifteen drops twice a-day, for grown persons, in a glass of spring-water.

ASTRINGENT DECOCTION.

Take of Cinnamon two drachms,
Peruvian Bark one ounce,
Spring Water three English pints.

Boil these together till only one half remains; then strain off the liquor clearly, after it has cooled, and add,

Weak Spirit of Vitriol one drachm,
Nutmeg, or Dutch Cinnamon water, one ounce.

Dose, two ounces twice a-day, for grown persons.

STRONG ASTRINGENT DECOCTION.

Take of Canella Alba two drachms,
Peruvian Bark,
Oak Bark, of each half an ounce,
Spring Water two English pints.

Boil these till one pint remains, pour the liquor clear off, and add the same materials as to the former decoction.

Dose, two ounces twice a-day, for grown persons.

ASTRINGENT INFUSION.

Take of Dried Scarlet Roses a handful.
Pour on these a pint of boiling water.

After four hours, strain off the liquor, and add,

Weak Spirit of Vitriol one drachm,
Syrup of Roses one ounce.
Mix them together.

Dose,

Doſe, one or two table-ſpoonsful, for grown perſons, every two or three hours, according to circumſtances.

ASTRINGENT MIXTURE.

Take of Laudanum one drachm,
Japonic Confection,
Refined Sugar, of each two drachms.

Rub theſe together in a glaſs mortar, and add,

Of ſimple Cinnamon-water one ounce,
Spring Water three ounces.
Mix them.

Doſe, a table-ſpoonful every three hours for grown perſons, and for infants a tea-ſpoonful, diluted with as much water.

ASTRINGENT POWDER.

Take of Powdered Ginger fifteen grains,
Rock Allum half a drachm,
Kino (*Gum Kino*) two drachms,
Catechu (*Japonic Earth*) one drachm.
Rub theſe together into a very fine powder.

Doſe for grown perſons, ten grains every two or three hours, in marmalade or conſerve of roſes.

For

For External Use.

Solutions of Sugar of Lead. See pages 110. & 111.

ASTRINGENT LOTION.

Diſſolve one drachm of White Vitriol in a pint of ſpring water.

STRONG ASTRINGENT LOTION.

Diſſolve two drachms of common Allum in one pint of ſpring water.

ASTRINGENT DECOCTION.

Take of Oak Bark two ounces,
Spring Water two pounds.

Boil into one pound; to which, when ſtrained, add,
One drachm of Alum.

BITTERS.

COLUMBO POWDER.

Doſe for grown perſons, ten grains twice a-day, in marmalade.

INFUSION OF CHAMOMILE FLOWERS.

Take of Chamomile Flowers, dried, a handful,
Pour on them a quart of ſpring cold water.

After twenty-four hours, ſtrain off the liquor.

Doſe for grown perſons, a ſmall tea-cupful twice a-day.

BITTERS FOR INFUSION IN WATER.

Take of Dried Yellow Rind of Seville Orange two drachms,
Root of ſweet-ſcented Flag,
Peruvian Bark, of each half an ounce.

Pour on theſe one quart of boiling water, and ſtrain off, after thirty-ſix hours.

Doſe for grown perſons, a ſmall tea-cupful.

BITTERS FOR INFUSION IN WINE.

Take of Leſſer Cardamom Seeds, bruiſed, one drachm,
Peruvian Bark,
Gentian Root, of each half an ounce.

Pour on these a quart-bottle of red port wine, and filter off the liquor after four days.

Dose for grown persons, a small wine-glass-ful twice a-day.

CARMINATIVES.

ANISE SUGAR.

Dose for children, six or eight grains.

ESSENCE OF PEPPERMINT.

Dose for grown persons, four or five drops on a small piece of sugar. For infants, half a drop on sugar dissolved in water.

CORDIALS.

ÆTHER.

Dose for grown persons, a tea-spoonful every hour or two, in a glass of spring water.

BARLEY CINNAMON WATER.

Dofe, a table-fpoonful for grown perfons, and for children a tea-fpoonful, diluted in as much water, every hour.

CORDIAL DRAUGHT.

Take of Volatile Tincture of Valerian thirty-five drops,
Simple Cinnamon Water,
Syrup, of each three tea-fpoonsful.
Mix them together.
To be taken at once for grown perfons.

CORDIAL DROPS.

Take of Paregoric Elixir,
Volatile Tincture of Valerian, of each equal parts.
Mix them together.
Dofe, one tea-fpoonful in a glafs of water for grown perfons.

CORDIAL MIXTURE.

Take of Compound Spirit of Lavender,
Tincture of Saffron, each one tea-ſpoonful,
Syrup,
Simple Cinnamon Water, of each half an ounce,
Spring Water one ounce.
Mix them together.

Doſe for grown perſons, a table-ſpoonful every hour or two; for children, a tea-ſpoonful diluted with water *.

DIAPHORETICS.

ANTIMONIAL WINE.

Doſe for grown perſons, twenty drops every hour or two, in gruel, till the proper effect be produced; for children, four or five drops every two hours.

* A great variety of other CORDIALS might have been added; but theſe, it is preſumed, will be found ſufficient for the purpoſe deſigned in this work.

DOVER'S POWDER.

Dose for grown persons, twenty grains in gruel or honey.

JAMES'S POWDER.

Dose for grown persons, seven or eight grains, divided into two parts, the one to be given an hour or two after the other, in marmalade or conserve of roses.

DIAPHORETIC DRAUGHT.

Take of Laudanum,
Antimonial Wine, of each twenty-five drops,
Simple Cinnamon Water,
Syrup, of each three tea-spoonsful.
Mix them.

To be taken at bed-time, for grown persons.

SALINE JULEP.

Take of Lemon Juice three table-spoonsful,
Volatile Sal. Ammoniac. one drachm.
After the effervescence, add,
Syrup two tea-spoonsful,

Simple Cinnamon Water half an ounce,
Spring Water, three ounces.
Mix them.

Dose for grown persons, two table-spoonsful every three hours.

DIURETICS.

OIL OF JUNIPER.

Dose for grown persons, ten drops in gruel; for children, one drop on a little sugar, which may then be mixed with panada.

NITRE.

Dose, ten grains mixed with sugar, and put into gruel, twice or thrice a-day, for grown persons.

DRIED SQUILL.

Dose for grown persons, a grain three or four times a-day, in the form of pills.

DRINKS.

ALMOND EMULSION.

Take of Sweet Almonds, blanched, four ounces,
Refined Sugar two ounces.

Beat them well in a marble mortar, and then add, by degrees,
Simple Cinnamon-water three ounces,
Spring Water a pint and an half.

Doſe for grown perſons, a tea-cupful every two hours.

BARLEY WATER.

Doſe, a little at any time when thirſty.

JELLY WATER.

Diſſolve two table-ſpoonsful of Currant Jelly in one pint of boiling water.

Doſe for grown perſons, two table-ſpoonsful when thirſty; for children, one or two tea-ſpoonsful.

IMPERIAL DRINK.

Take of Cream of Tartar two drachms,
Outer Rind of fresh Lemon one drachm,
Boiling water one quart.

After it is cool, strain off the liquor.

Dose, a tea-cupful every hour or two, for grown persons; for children, a table-spoonful.

LEMONADE.

RICE-GRUEL.

WATER-GRUEL.

WHITE-WINE WHEY.

The use of these is well known.

EMETICS.

ANTIMONIAL WINE.

Dose for grown persons, two tea-spoonsful; for children, ten or fifteen drops.

IPECACUAN (in Powder.)

Doſe for grown perſons, fifteen or twenty grains, mixed with ſugar and warm water; for children, three or four grains, mixed with ſyrup.

IPECACUAN WINE.

Doſe for children, one, two, or three tea-ſpoonsful, according to the age.

EMETIC TARTAR *.

Doſe for grown perſons, two grains diſſolved in warm water.

VOMITING MIXTURE.

Take of Antimonial Wine one drachm,
Squill Vinegar two drachms,
Syrup one ounce,
Spring or Roſe Water three ounces.
Mix them.

* Emetic Tartar muſt never be given to infants; for alarming convulſions have often followed its uſe.

Doſe

Doſe for children, two tea-ſpoonsful, or a table-ſpoonful, according to the age *.

LAXATIVES.

CALOMEL.

Doſe for children, one or two grains in panada, according to the age.

CASTOR OIL.

Doſe for grown perſons, a table-ſpoonful every ſix hours, till it operates; for children, a tea-ſpoonful. To be given in gruel.

CREAM OF TARTAR.

Doſe for grown perſons, two or three tea-ſpoonsful at bed-time, with a little Nutmeg, in water or gruel.

LAXATIVE ELECTUARY.

Take of Powder of Jalap twenty grains,
Chryſtals of Tartar,
Refined Sugar, each two drachms.

* This mixture is particularly uſeful when children are troubled with cough.

Rub

Rub them well together in a marble or glaſs mortar, then add,

Lenitive Electuary one ounce and an half,

Syrup of Roſes, as much as will make the whole into a ſoft conſiſtence.

Doſe for grown perſons, a drachm every two hours till it operates.

STRONG LAXATIVE ELECTUARY.

Take of Powder of Ginger ten grains,

Powder of Jalap, in fine powder, one drachm,

Cream of Tartar one ounce,

Syrup, as much as will give the whole a proper conſiſtence.

Doſe for grown perſons, two drachms in the morning.

LAXATIVE PILLS.

Take of Powder of Cinnamon ten grains,

Socotorine Aloes in fineſt powder,

Caſtile Soap, each one drachm.

Beat them together in a ſtone mortar, and then add two or three drops of ſyrup, ſo as

to form a maſs, which is to be made into thirty-two pills.

Doſe for grown perſons, two at bed-time.

STRONG LAXATIVE PILLS.

Take of Powder of Ginger ten grains,
Calomel half a drachm,
Caſtile Soap forty grains,
Socotorine Aloes in the fineſt powder, one drachm and an half.

Form theſe, as directed in the preceding receipt, into forty-two pills.

Doſe for grown perſons, One or two at bed-time, according to the ſtate of the belly.

LAXATIVE POWDER.

Take of Calomel three grains,
Powder of Jalap ten grains.

Rub them well together in a glaſs-mortar.

To be taken in the morning in marmalade for grown perſons.

LAXATIVE DRAUGHT.

To the Laxative Powder add,
Powder of Ginger three grains,
Syrup half an ounce. Mix them.

To be taken in the morning. For grown perſons.

LAX-

LAXATIVE SALTS.

Of theſe the beſt is PHOSPHORATED SODA, To be given in Soup in which no Salt has been put.

Doſe for grown perſons, Six drachms, or one ounce.

MAGNESIA.

Doſe for children, a tea-ſpoonful in the morning.

MANNA.

To be diſſolved in boiling water.

Doſe, A tea-ſpoonful every two hours till it operates. For children.

INFUSION OF RHUBARB.

Take of Turkey Rhubarb in rough powder one drachm,
Refined Sugar a drachm and a half,
Salt of Tartar five grains,
Boiling water two ounces.

After ſix hours ſtrain off the liquor, and add Simple Cinnamon water a table-ſpoonful.

Doſe for children, Two tea-ſpoonsful, or a table-ſpoonful in the morning, according to the age.

INFUSION OF SENNA.

Take of Senna without the ſtalks three drachms,
Tamarinds half an ounce,
Boiling water ten ounces.

After eight hours ſtrain off the liquor.

Doſe for grown perſons, A ſmall tea-cupful every hour and a half, till it operates.

LAVEMENS. *

For grown Perſons.

EMOLLIENT LAVEMENT.

Take of Common Salt,
Kitchen Sugar, of each a table-ſpoonful,
Fine Olive Oil four ounces,
Warm water half a pint.

Mix them.

ANODYNE LAVEMENT.

Take of Laudanum one drachm,
Olive Oil two ounces,
Thin Gruel moderately warm half a pint.

Mix them.

* LAVEMENT in the whole of this Work has been uſed for the Engliſh word GLYSTER.

RE-

RESTRINGENT LAVEMENT.

Add to the preceding receipt
of Catechu (Japonic Earth) two drachms.
Peruvian Bark three drachms.
Mix them.

STRONG LAXATIVE LAVEMENT. *

Take of Senna half an ounce,
Spring water one pint.
Boil them till half a pint only remains, and to the ſtrained liquor add,
Common Salt two table-ſpoonsful,
Fine Olive Oil four ounces.
Mix them.

For Children.

EMOLLIENT LAVEMENT.

Take of Common Salt a tea-ſpoonful,
Fine Olive Oil a table-ſpoonful,
Warm water three ounces.
Mix them.

* Nouriſhing Lavemens may be formed by adding to half a pint of beef-tea or thin gruel, fifteen or twenty drops of Laudanum.

N. B. The laudanum is added to prevent the glyſter from being rejected.

LAX-

LAXATIVE LAVEMENT.

Take of Phoſphorated Soda two drachms,
Boiling water three ounces.
Add, when nearly cool,
Fine Olive Oil a table-ſpoonful.
Mix them.

ANODYNE LAVEMENT.

Take of Laudanum five or ten drops, (according to the age),
Beef-tea a ſmall tea-cupful.
Mix them.

RESTRINGENT LAVEMENT.

Take of Laudanum the ſame quantity as in the preceding receipt,
Rice-Gruel a ſmall tea-cupful.
Mix them.

REFRIGERANTS.

ACIDULATED DRINKS.

Ripe aceſcent fruits.

NITROUS

NITROUS MIXTURE.

Take of Nitre one drachm,
Refined Sugar two drachms,
Diſtilled Vinegar a table-ſpoonful,
Spring Water ſix ounces and a half.
Mix them.

Doſe for grown perſons, A table-ſpoonful every two hours when neceſſary.

STRENGTHENING MEDICINES.

BITTERS.

See page 526. 527. for the doſes, &c.

ELIXIR OF VITRIOL.

See page 523.

PERUVIAN BARK (in various Forms.)

See page 523. 524.

TINCTURE OF BARK.

Doſe, A table-ſpoonful in a glaſs of wine, barley-cinnamon, or peppermint-water, twice a-day.

SUGAR OF STEEL. *

Doſe for children, Thirty or forty grains or more twice a-day, according to the age.

TINCTURE OF STEEL.

Doſe, Fifteen or twenty drops twice a-day, in beef-tea or veal-broth.

RUST OF STEEL.

Doſe for grown perſons, Half a drachm twice a-day in marmalade.

* Called by confectioners Steel Carvy.

DI-

DIRECTIONS *for those who Consult a* PHYSICIAN *by* LETTER.

MANY of the complaints to which women and children are liable, can be alleviated or removed by the advice of a skilful practitioner; though some are so rapid in their progress, as to prevent the possibility of consulting a physician at any distance from the patient.

The same disease in different persons often requires a very great variety of treatment; and therefore no general rules can be applicable to every case; hence the advice of one who has been accustomed to any particular line of practice, is with much reason considered on many occasions indispensable.

No physician ought, from principles of honour, to prescribe in any case without consulting with the medical assistant who has already attended the patient; for there are so many peculiarities in the constitutions of different people, that much harm may be done if these are overlooked, or not understood.

But practitioners of midwifery are often necessarily obliged, from motives of delicacy, to dispense with this general rule; and therefore they must learn every circumstance of their patient's situation from her own description. With the view of preventing many of those errors which frequently originate from the imperfect accounts of people unacquainted with the healing art, the few following observations are suggested as directions for those who consult a physician by letter.

The age, constitution, situation in life, and ordinary habits of the patient, should be first enumerated. If unmarried, the state of her uterine health ought to be described; if married, the number of children, or miscarriages, and the period between each, must be mentioned, and also whether any of the children had been nursed by their mother.

The present complaints of the patient should be then minutely detailed; and although in as few words as possible, no circumstance ought to be neglected. The nature of the human frame is such, that when one part is deranged, other parts also suffer; but though the practitioner must generally

generally attend to the primary diſeaſes, yet a patient cannot eaſily draw the line of diſtinction between thoſe ſymptoms which conſtitute, properly ſpeaking, her diſorder, and thoſe which originate from them; and hence that ſhould be left for the practitioner.

A ſummary account of the beginning and the order of recurrence of the ſymptoms ought next to be given; and the patient's ſentiments on the probable cauſes of the complaint ſhould be added.

The ſtate of the appetite for food, and of the excretions, as perſpiration, &c. muſt be particularly deſcribed, as well as the appearance of the tongue.

Laſtly, The remedies which have been taken, and their apparent effects, ſhould be accurately enumerated; and the patient ought alſo to mention to the phyſician any peculiarity of conſtitution, which may render the preſcription of certain medicines, as opium, &c. improper.

It may appear perhaps unneceſſary to add, that wherever it can be done, the caſe for conſultation ſhould be written by the family medical aſſiſtant.

HINTS *respecting the Choice of a* NURSE.

MUCH caution, it is obvious, is required in the choice of one to whom ſo important a charge as that of an infant is confided.

The appearance of health, an unexceptionable moral character, plenty of wholeſome milk, and breaſts well formed in every reſpect, with prominent nipples, are always expected in a NURSE. But theſe are not the only circumſtances which ought to be aſcertained. Her child ſhould be healthy and thriving; and no woman who bears a dead child can in general be choſen; for, unleſs the death happened in conſequence of ſome particular accident during delivery, there is always, in ſuch caſes, ſome reaſon to ſuſpect a fault in the conſtitution.

Women addicted to the uſe of tobacco in any form, and thoſe who have never had the Smallpox, or are very much marked by them, make improper Nurſes.

It

It is not ſufficient to avoid Nurſes who are ſuſpected of having ſome *diſeaſe* which may be communicated to the child; for ſome blemiſhes may alſo be attended with the ſame bad effects, ſuch as immoderate Squinting.

Sometimes, however, young healthy-looking women, having every mark which can be deſcribed as conſtituting good Nurſes, are found to be unfit for that important office; and therefore, in general, no woman ſhould be hired as a nurſe who has not already given proofs, by nurſing her own child, that ſhe is well qualified for the taſk.

Although, for reaſons formerly adduced, when an infant is neceſſarily ſent into the houſe of a hired Nurſe, a good ſituation in the country ſhould be choſen; yet no child ought to be placed at a conſiderable diſtance from his parents; otherwiſe thoſe attentions with reſpect to management, on which his health muſt depend, will ſeldom be faithfully paid.

THE END.